ENTRY MONTH:

200008

ENTRY DATE:

Entered STN: 20000901

Last Updated on STN: 20000901 Entered Medline: 20000821

L5 ANSWER 9 OF 25 MEDLINE on STN

TI Thrombin peptide, **TP508**, induces differential gene expression in fibroblasts through a nonproteolytic activation pathway.

Prior studies have shown that synthetic peptides representing the domain AΒ of thrombin responsible for high-affinity binding to fibroblasts stimulate chemotactic and cell proliferative signals through a nonproteolytic mechanism. One of these peptides, TP508, has recently been shown to be chemotactic for neutrophils, to enhance collagen accumulation in wounds, to enhance revascularization of wounds, and to accelerate the healing of incisional and open wounds in normal animals and in animals with impaired healing. To determine whether TP508 activates the proteolytically activated receptor for thrombin (PAR1), or the signals that are activated by PAR1, we treated human fibroblasts with TP508 and the PAR1-activating peptide, SFLLRNP, and analyzed the effects of these peptides on gene expression using differential display reverse transcriptase polymerase chain reaction. TP508 induces expression of a number of specific message fragments with short tyrosine kinase-like domains that are not induced by SFLLRNP. Sequencing full-length clones prepared by Marathon extension of TP508 -induced fragments revealed that among the induced transcripts, there was a sequence with 88% homology to human annexin V. Northern analysis with authentic annexin V cDNA confirms that TP508, but not SFLLRNP, induces expression of annexin V in human fibroblasts. These results demonstrate that TP508 activates a cellular response separate from that activated through PAR1 and supports the hypothesis that TP508 acts through a separate nonproteolytically activated thrombin receptor that may be responsible for high-affinity thrombin binding and for nonproteolytic signals that are required for thrombin stimulation of cell proliferation.

Copyright 1999 Academic Press.

ACCESSION NUMBER:

1999167419 MEDLINE

DOCUMENT NUMBER:

99167419 PubMed ID: 10066370

TITLE:

Thrombin peptide, TP508, induces differential

gene expression in fibroblasts through a nonproteolytic

activation pathway.

AUTHOR:

Sower L E; Payne D A; Meyers R; Carney D H

CORPORATE SOURCE:

The Department of Human Biological Chemistry and Genetics, The University of Texas Medical Branch, Galveston, Texas,

77555-0645, USA.

CONTRACT NUMBER:

5RO1 GM47572 (NIGMS)

SOURCE:

EXPERIMENTAL CELL RESEARCH, (1999 Mar 15) 247 (2) 422-31.

Journal code: 0373226. ISSN: 0014-4827.

PUB. COUNTRY:

United States

DOCUMENT TYPE: LANGUAGE: Journal; Article; (JOURNAL ARTICLE)

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199904

ENTRY DATE:

Entered STN: 19990426

Last Updated on STN: 19990426 Entered Medline: 19990413

L5 ANSWER 10 OF 25 USPATFULL on STN

TI Therapeutic and cosmetic uses of heparanases

AB Methods and compositions for inducing and/or accelerating wound healing and/or angiogenesis via the catalytic activity of heparanase are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:231625 USPATFULL

NEWS PHONE

NEWS WWW

Welcome to STN International! Enter x:x LOGINID:ssspta1653hxp PASSWORD: TERMINAL (ENTER 1, 2, 3, OR ?):2 \* \* \* \* \* \* Welcome to STN International Web Page URLs for STN Seminar Schedule - N. America NEWS "Ask CAS" for self-help around the clock NEWS 2 CA/CAplus records now contain indexing from 1907 to the NEWS SEP 09 present INPADOC: Legal Status data reloaded DEC 08 NEWS 4 DISSABS now available on STN SEP 29 NEWS 5 PCTFULL: Two new display fields added OCT 10 NEWS 6 NEWS 7 OCT 21 BIOSIS file reloaded and enhanced BIOSIS file segment of TOXCENTER reloaded and enhanced OCT 28 NEWS 8 NEWS 9 NOV 24 MSDS-CCOHS file reloaded CABA reloaded with left truncation DEC 08 NEWS 10 DEC 08 IMS file names changed NEWS 11 Experimental property data collected by CAS now available NEWS 12 DEC 09 in REGISTRY STN Entry Date available for display in REGISTRY and CA/CAplus DEC 09 NEWS 13 DGENE: Two new display fields added DEC 17 NEWS 14 BIOTECHNO no longer updated DEC 18 NEWS 15 CROPU no longer updated; subscriber discount no longer NEWS 16 DEC 19 available Additional INPI reactions and pre-1907 documents added to CAS DEC 22 NEWS 17 databases IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields NEWS 18 DEC 22 ABI-INFORM now available on STN NEWS 19 DEC 22 Source of Registration (SR) information in REGISTRY updated NEWS 20 JAN 27 and searchable A new search aid, the Company Name Thesaurus, available in NEWS 21 JAN 27 CA/CAplus German (DE) application and patent publication number format NEWS 22 FEB 05 changes NEWS EXPRESS DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003 STN Operating Hours Plus Help Desk Availability NEWS HOURS General Internet Information NEWS INTER Welcome Banner and News Items NEWS LOGIN

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

CAS World Wide Web Site (general information)

Direct Dial and Telecommunication Network Access to STN

\* \* \* \* STN Columbus \* \* \*

FILE 'HOME' ENTERED AT 10:48:05 ON 17 FEB 2004

=> file medline, uspatful, dgene, fsta, wpids COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 10:48:46 ON 17 FEB 2004

FILE 'USPATFULL' ENTERED AT 10:48:46 ON 17 FEB 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 10:48:46 ON 17 FEB 2004 COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'FSTA' ENTERED AT 10:48:46 ON 17 FEB 2004 COPYRIGHT (C) 2004 International Food Information Service

FILE 'WPIDS' ENTERED AT 10:48:46 ON 17 FEB 2004 COPYRIGHT (C) 2004 THOMSON DERWENT

=> s NPAR ornon-proteolytic thrombin cell surface receptors O NPAR ORNON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS L1

=> s NPAR or non-proteolytic thrombin cell surface receptors 39 NPAR OR NON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS

=> d l2 ti abs ibib tot

ANSWER 1 OF 39 MEDLINE on STN L2

Osmium phosphiniminato complexes: synthesis, protonation, structure, and ΤТ redox-coupled hydrolytic scission of N-p bonds.

The osmium(VI) nitrido complex TpOs(N)Cl(2) [1, Tp = hydrotris(1-AB pyrazolyl)borate] reacts with triarylphosphines to afford the Os(IV) phosphiniminato complexes TpOs(NPAr(3))Cl(2) [Ar = p-tolyl (tol) (2a), phenyl (2b), p-CF(3)C(6)H(4) (2c)] in nearly quantitative yield. Protonation of 2a-c with 1 equiv of HOTf in MeCN occurs at the phosphiniminato nitrogen to give [TpOs(IV)(NHPAr(3))Cl(2)]OTf(3a-c) in 68-80% yield. Solutions of 2a-c in CH(2)Cl(2) react with excess H(2)Oover 1 week to form the disproportionation products 1 (28%), TpOs(III)(NHPAr(3))Cl(2)(4a-c)(60%), and OPAr(3)(35%). Treatment of solutions of 3a-c with H(2)O also affords 1, 4a-c, and OPAr(3). X-ray structures of 2b, 3b, and 4b are presented. Cyclic voltammograms of compounds 2a-c exhibit Os(V)/Os(IV) and Os(IV)/Os(III) couples at approximately 0.3 and -1 V versus Cp(2)Fe(+/0). Protonation to give 3 makes reduction easier by approximately 1.2 V, so that these compounds show Os(IV)/Os(III) and Os(III)/Os(II) couples. In the hydrolytic disproportionation of 2a-c, labeling studies using (18)0-enriched O(2) and H(2)O establish water as the source of the oxygen atom in the OPAr(3) product. The conversions are accelerated by HOTf and inhibited by NaOD. The relative rates of hydrolytic disproportionation of 2a-c vary in the order tol > Ph > p-CF(3)C(6)H(4). The data indicate that protonation of the phosphiniminato nitrogen is required for hydrolysis. The mechanism of the hydrolytic disproportionation is compared to that of the related reaction of the osmium(IV) acetonitrile complex [TpOs(NCMe)Cl(2)](+).

ACCESSION NUMBER: DOCUMENT NUMBER:

2003291887 IN-PROCESS

PubMed ID: 12817971

TITLE:

Osmium phosphiniminato complexes: synthesis, protonation, structure, and redox-coupled hydrolytic scission of N-p

AUTHOR:

Bennett Brian K; Saganic Erik; Lovell Scott; Kaminsky

Werner; Samuel Amanda; Mayer James M

Department of Chemistry, Campus Box 351700, University of CORPORATE SOURCE:

Washington, Seattle, Washington 98195-1700, USA.

Inorganic chemistry, (2003 Jun 30) 42 (13) 4127-34. SOURCE:

Journal code: 0366543. ISSN: 0020-1669.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

English LANGUAGE:

IN-PROCESS; NONINDEXED; Priority Journals FILE SEGMENT:

Entered STN: 20030624 ENTRY DATE:

Last Updated on STN: 20031218

ANSWER 2 OF 39 MEDLINE on STN L2

Long-term assessment of neuropsychiatric adverse reactions associated with ΤI efavirenz.

OBJECTIVES: The Sensio study objectives were to assess the outcome of AB neuropsychiatric adverse reactions (NPAR) that develop after initiation of efavirenz (EFV) therapy, to ascertain the late NPAR after a 3-month treatment period, to evaluate the impact of NPAR on patients' quality of life (QoL) in a real-life population. METHODS: During a 6-month period, consecutive HIV-infected adult outpatients receiving an ongoing EFV therapy for at least 3 months were asked to fill in a specifically designed self-administered questionnaire addressing sleep disturbances, behavioural changes, mood disturbances, anxiety, cognitive disorders, hallucinations, dizziness and the general impact on patients' QoL. RESULTS: A total of 174 questionnaires were analyzed. The main late emergent NPAR were sleep disorders: abnormal dreams 24.7%, nocturnal waking 19.6%, trouble falling asleep 17.8%; cognitive disorders: memory disorders 23.0%, impaired concentration 18.9%; anxiety 15.5%; mood disorders: sadness 19.3%, suicidal ideations 9.2%. Global neuropsychic discomfort was moderate to severe in 23% of patients after a 3-month treatment period. CONCLUSION: NPAR occur mainly during the first month of EFV therapy but often persist thereafter. A significant percentage of patients reported suicidal ideations at the time of the study. Our results suggest the need for routine screening for NPAR among patients receiving EFV therapy and better management.

ACCESSION NUMBER:

2003069343 MEDLINE

DOCUMENT NUMBER:

22423246 PubMed ID: 12534961

TITLE:

Long-term assessment of neuropsychiatric adverse reactions

associated with efavirenz.

**AUTHOR:** 

SOURCE:

Lochet P; Peyriere H; Lotthe A; Mauboussin J M; Delmas B;

Reynes J

CORPORATE SOURCE:

Department of Infectious Diseases, Gui de Chauliac

Hospital, Montpellier, France. HIV Med, (2003 Jan) 4 (1) 62-6.

Journal code: 100897392. ISSN: 1464-2662.

PUB. COUNTRY:

England: United Kingdom

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

(MULTICENTER STUDY)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200303

ENTRY DATE:

Entered STN: 20030214

Last Updated on STN: 20030307 Entered Medline: 20030306

MEDLINE on STN L2 ANSWER 3 OF 39

[Dental care frequency of female patients in the Netherlands]. TITandheelkundige zorgconsumptie van vrouwelijke patienten in Nederland.

OBJECTIVE: Investigate whether there are differences between men and women AΒ in dental attendance and in the consumption of dental care. DESIGN: Descriptive analysis, using SPSS (ANOVA, NPAR TEST), based on information on the treatments that are performed for dentate patients. SETTING: Department of Research (afd. O&I) of the Dutch Dental Association (NMT), Nieuwegein, The Netherlands. METHODS: From the

practice-administration of 202 dentists, anonymous information was gathered on the treatments these dentists performed for 7698 dentate patients in the years 1993 to 1996. RESULTS: The results indicate that for young people there is only a difference in relation to fillings: girls receive fewer fillings than boys. For adults, however, more differences are apparent. First of all, women visit the dentist for a routine check-up somewhat more often than men. In addition, more X-rays are taken, more instruction is given on oral hygiene and more crowns are made for women, while they receive fewer fillings. CONCLUSION: Adult women and adult men show differences in dental attendance and consumption. These differences are, albeit partially, explained by the fact that adult women are proportionally more often insured for dental costs via the national health service.

ACCESSION NUMBER:

2002195261 MEDLINE

DOCUMENT NUMBER:

21926467 PubMed ID: 11928462

TITLE:

[Dental care frequency of female patients in the

Netherlandsl.

Tandheelkundige zorgconsumptie van vrouwelijke patienten in

Nederland.

AUTHOR :

Bruers J J; van Rossum G M

Afdeling Onderzoek en Informatievoorziening, Nederlandse CORPORATE SOURCE:

Maatschappij tot bevordering der Tandheelkunde, postbus

2000, 3430 CA Nieuwegein.

SOURCE:

NEDERLANDS TIJDSCHRIFT VOOR TANDHEELKUNDE, (1998 Nov) 105

(11) 412-5.

Journal code: 0400771. ISSN: 0028-2200.

PUB. COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

Dutch

FILE SEGMENT:

Dental Journals

ENTRY MONTH:

200207 Entered STN: 20020404

ENTRY DATE:

Last Updated on STN: 20020725 Entered Medline: 20020724

ANSWER 4 OF 39 MEDLINE on STN  $L_2$ 

TΤ Genetic architecture of testis and seminal vesicle weights in mice.

Comparisons across 13 inbred strains of laboratory mice for reproductive organ (paired seminal vesicles and paired testes) weights indicated a very marked contrast between the C57BL/6By and NZB/BINJ mice. Subsequently these strains were selected to perform a quantitative genetic analysis and full genome scan for seminal vesicle and testis weights. An F(2) population was generated. The quantitative genetic analyses indicated that each was linked to several genes. Sixty-six short sequences for length polymorphism were used as markers in the wide genome scan strategy. For weight of paired testes, heritability was 82.3% of the total variance and five QTL contributed to 72.8% of the total variance. Three reached a highly significant threshold (>4.5) and were mapped on chromosome X (LOD score 9.11), chromosome 4 (LOD score 5.96), chromosome 10 (LOD score 5.81); two QTL were suggested: chromosome 13 (LOD score 3.10) and chromosome 18 (LOD score 2.80). Heritability for weight of seminal vesicles was 50.7%. One QTL was mapped on chromosome 4 (LOD score 9.21) and contributed to 24.2% of the total variance. The distance of this QTL to the centromere encompassed the distance of the QTL linked with testicular weight on chromosome 4, suggesting common genetic mechanisms as expected from correlations in the F(2). Both testis and seminal vesicle weights were associated with a reduction in the NZB/BINJ when this strain carried the Y(NPAR) from CBA/H whereas the Y(NPAR) from NZB/BINJ in the CBA/H strain did not modify reproductive organ weights, indicating that the Y(NPAR) interacts with the non-Y(

NPAR) genes. The effects generated by this chromosomal region

were significant but small in size. ACCESSION NUMBER: 2001396093 MEDLINE

DOCUMENT NUMBER: 21231621 PubMed ID: 11333241 TITLE: Genetic architecture of testis and seminal vesicle weights

in mice.

AUTHOR: Le Roy I; Tordjman S; Migliore-Samour D; Degrelle H;

Roubertoux P L

CORPORATE SOURCE: Genetique, Neurogenetique, Comportement, UPR CNRS, 3 B rue

de la Ferollerie, 45071 Orleans Cedex, France.

SOURCE: GENETICS, (2001 May) 158 (1) 333-40.

Journal code: 0374636. ISSN: 0016-6731.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200107

ENTRY DATE: Entered STN: 20010716

Last Updated on STN: 20010716 Entered Medline: 20010712

L2 ANSWER 5 OF 39 MEDLINE on STN

TI Y chromosomal and sex effects on the behavioral stress response in the defensive burying test in wild house mice.

Genetically selected short attack latency (SAL) and long attack latency AB (LAL) male wild house mice behave differently in the defensive burying test. When challenged, SAL males respond actively with more time spent on defensive burying, whereas LAL males are more passive with more time remaining immobile. The first aim of this study was to find out whether the nonpairing part of the Y chromosome (Y(NPAR)) affects the behavioral stress response in this paradigm. Second, to determine if the differential behavioral profile found in males is also present in females, SAL and LAL females were tested. Third, nonattacking and attacking LAL males were compared. Five behavioral elements were recorded: defensive burying, immobility, rearing, grooming, and exploration. Males were first tested for attack latency. The results show that the Y(NPAR) influences defensive burying. However, the size of this effect is overshadowed by the background of the mice. Furthermore, although females differed from males, they tended to demonstrate the same behavioral profile as males. Nongenetic factors may also play a role, as attacking LAL males showed more defensive burying than nonattacking LAL males.

ACCESSION NUMBER: 2000016090 MEDLINE

DOCUMENT NUMBER: 20016090 PubMed ID: 10549897

TITLE: Y chromosomal and sex effects on the behavioral stress

response in the defensive burying test in wild house mice.

AUTHOR: Sluyter F; Korte S M; Van Baal G C; De Ruiter A J; Van

Oortmerssen G A

CORPORATE SOURCE: University of Nijmegen, Department of

Psychoneuropharmacology, The Netherlands..

f.sluyter@pnf.kun.nl

SOURCE: PHYSIOLOGY AND BEHAVIOR, (1999 Oct) 67 (4) 579-85.

Journal code: 0151504. ISSN: 0031-9384.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199912

ENTRY DATE: Entered STN: 20000113

Last Updated on STN: 20000113 Entered Medline: 19991213

L2 ANSWER 6 OF 39 MEDLINE on STN

TI Radial maze learning in two inbred mouse strains and their reciprocal congenics for the non-pseudoautosomal region of the Y chromosome.

AB The effect of the non-pseudoautosomal region of the Y chromosome on spatial learning in a radial maze task was examined in two inbred mouse strains, NZB and CBA/H, and their respective congenics for the Y(NPAR). Seven variables reflecting learning performance, learning

strategy and lateralisation were measured. We found no substantial effect of the Y(NPAR) on radial maze learning, but modest influences on behavioral strategies. These findings are in agreement with previous results regarding the sizes of the intra- and infrapyramidal mossy fiber (IIPMF) terminal fields.

Copyright 1999 Elsevier Science B.V. ACCESSION NUMBER: 1999380804 MEDLINE

DOCUMENT NUMBER:

PubMed ID: 10448197 99380804

TITLE:

Radial maze learning in two inbred mouse strains and their reciprocal congenics for the non-pseudoautosomal region of

the Y chromosome.

AUTHOR:

Sluyter F; Marican C C; Roubertoux P L; Crusio W E

CORPORATE SOURCE:

Department of Psychoneuropharmacology, Geert Grooteplein N 21, P.O. Box 9101, 6500 HB, Nijmegen, The Netherlands..

f.sluyter@pmf.kun.nl

SOURCE:

BRAIN RESEARCH, (1999 Jul 17) 835 (1) 68-73.

Journal code: 0045503. ISSN: 0006-8993.

PUB. COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199909

ENTRY DATE:

Entered STN: 19991005

Last Updated on STN: 19991005 Entered Medline: 19990920

ANSWER 7 OF 39 MEDLINE on STN L2

Searching for candidate genes with effects on an agonistic behavior, TIoffense, in mice.

It is well established that the agonistic behavior of offense in mice is AB heritable. However, few genes have been identified or mapped for offense. For segments of chromosomes with effects on offense, a positional candidate strategy can be used to find such genes. This approach is illustrated for the effect of the male specific part (nonpseudoautosomal region; NPAR) of the mouse Y chromosome on offense. It is proposed that a positional candidate for this effect is Sry. The Sry protein is a transcription factor. Its mRNA is expressed in fetal and adult brain. Its protein binds to response elements in the 5' end of the aromatase and the Fral genes. Each of these genes has potential effects on several brain neurotransmitter systems involved in offense. The NPAR Y chromosomes of several pairs of inbred strains have differential effects on offense. This hypothesis would be tested by

sequencing Sry for some of these pairs of strains.

ACCESSION NUMBER:

97075554 MEDLINE

DOCUMENT NUMBER:

PubMed ID: 8917945 97075554

TITLE:

Searching for candidate genes with effects on an agonistic

behavior, offense, in mice.

AUTHOR:

Maxson S C

CORPORATE SOURCE:

Department of Psychology, University of Connecticut, Storrs

06269-4154, USA.. smaxson@uconnvm.uconn.edu

SOURCE:

BEHAVIOR GENETICS, (1996 Sep) 26 (5) 471-6. Ref: 70

Journal code: 0251711. ISSN: 0001-8244.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199701

ENTRY DATE:

T<sub>1</sub>2

Entered STN: 19970128

Last Updated on STN: 19970128 Entered Medline: 19970115

Activation of multiple xDSL modems with half duplex and full duplex TI

Method for terminating a startup session of a full duplex or half duplex AΒ communication to be established between a central terminal and the remote terminal. When predetermined data is transmitted upon reception of an ACK message transmitted by one of the central or remote terminals, a data transmission in the startup session is suspended. If the other one of the central or remote terminals receives the predetermined data and thereafter detects a predetermined period of silence, the startup session is terminated.

2004:37464 USPATFULL ACCESSION NUMBER:

Activation of multiple xDSL modems with half duplex and TITLE:

full duplex procedures

INVENTOR(S): Palm, Stephen, Tokyo, JAPAN

PANASONIC COMMUNICATIONS CO., LTD., Tokyo, JAPAN PATENT ASSIGNEE(S):

(non-U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_ US 2004027998 A1 20040212 US 2003-621351 A1 20030718 (10) PATENT INFORMATION:

APPLICATION INFO.:

Continuation of Ser. No. US 1999-473683, filed on 29 RELATED APPLN. INFO.:

Dec 1999, PENDING

NUMBER DATE \_\_\_\_\_

US 1999-115294P 19990108 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE

PLACE, RESTON, VA, 20191

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

12 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1209

ANSWER 9 OF 39 USPATFULL on STN L2

Activation of multiple xDSL modems with implicit channel probe TΙ A communication apparatus at a remote location is connectable to a AΒ communication apparatus at a central location. The apparatus includes a negotiation data transmitter that transmits negotiation data to the communication apparatus at the central location. The negotiation data includes an identification field that includes at least modulation independent information, a standard information field that includes at least modulation dependent information, and a non-standard information field that includes information other than information associated with the identification field and information associated with the standard information field.

2003:293571 USPATFULL ACCESSION NUMBER:

Activation of multiple xDSL modems with implicit TITLE:

channel probe

INVENTOR(S): Palm, Stephen, Tokyo, JAPAN

Matsushita Graphics Communication Systems, Inc., Tokyo, PATENT ASSIGNEE(S):

JAPAN (non-U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_\_ PATENT INFORMATION: US 2003206580 A1 20031106 US 2002-331665 A1 20021231 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-281813, filed on 31

Mar 1999, PENDING

NUMBER DATE \_\_\_\_\_

PRIORITY INFORMATION:

US 1998-80310P 19980401 (60) US 1998-89850P 19980619 (60) US 1998-93669P 19980722 (60)

US 1998-94479P 19980729 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

GREENBLUM & BERNSTEIN, P.L.C., 1941 Roland Clarke LEGAL REPRESENTATIVE:

Place, Reston, VA, 20191

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 2421

ANSWER 10 OF 39 USPATFULL on STN 1.2

TIActivation of multiple xDSL modems with implicit channel probe A communication apparatus and a communication device that are ΔR

selectively connectable to each other. A transmitter, associated with

one of the communication apparatus and the communication device, transmits a first predetermined signal, such as, for example, an MS signal, to designate a specific mode to the other one of the communication apparatus and the communication device. The first predetermined signal includes an identification field that stores modulation independent information and a standard information field that stores modulation dependent information. A receiver receives a second predetermined signal, such as, for example, an ACK signal or a NACK signal, in response to the first predetermined signal from the other one

of the communication apparatus and the communication device.

ACCESSION NUMBER:

2003:275908 USPATFULL

TITLE:

Activation of multiple xDSL modems with implicit

channel probe

INVENTOR(S):

Palm, Stephen, Tokyo, JAPAN

PATENT ASSIGNEE(S):

MATSUSHITA GRAPHIC COMMUNICATION SYSTEMS, INC., Tokyo,

JAPAN (non-U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_ \_\_\_ US 2003193929 A1 20031016 US 2002-175961 A1 20020621 (10) PATENT INFORMATION:

APPLICATION INFO.:

Continuation of Ser. No. US 1999-281813, filed on 31 RELATED APPLN. INFO.:

Mar 1999, PENDING

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

US 1998-80310P 19980401 (60) US 1998-89850P 19980619 (60) US 1998-94479P 19980729 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GREENBLUM & BERNSTEIN, P.L.C., 1941 ROLAND CLARKE

PLACE, RESTON, VA, 20191

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 2393

ANSWER 11 OF 39 USPATFULL on STN L2

Activation of multiple xDSL modems with implicit channel probe TI

Apparatus and method for establishing a communication link. A AB

negotiation data transmitting section, associated with a plurality of initiating communication devices, transmits carriers to a responding communication device. A negotiation data receiving section, associated with the plurality of initiating communication devices, receives carriers from the responding communication device, in response to the transmitted carriers. A selecting device selects an appropriate communication device from the plurality of communication devices, in accordance with the responding communication device, in order to establish a communication channel.

ACCESSION NUMBER:

2003:237031 USPATFULL

TITLE:

Activation of multiple xDSL modems with implicit

channel probe

INVENTOR(S):

Palm, Stephen, Tokyo, JAPAN

PATENT ASSIGNEE(S):

MATSUSHTA GRAPHIC COMMUNICATION SYSTEMS, INC., Tokyo,

JAPAN (non-U.S. corporation)

KIND DATE NUMBER \_\_\_\_\_ US 2003165188 A1 20030904 US 2002-287005 A1 20021104 (10) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-281813, filed on 31

Mar 1999, PENDING

NUMBER DATE \_\_\_\_\_\_ US 1998-80310P 19980401 (60) PRIORITY INFORMATION: US 1998-89850P 19980619 (60) US 1998-93669P 19980722 (60) US 1998-94479P 19980729 (60) Utility

41

1

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE

PLACE, RESTON, VA, 20191

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT: 2429

T<sub>1</sub>2 ANSWER 12 OF 39 USPATFULL on STN

Activation of multiple xDSL modems with implicit channel probe ΤI A communication apparatus that is selectively connectable to a AB communication device. A communicator executes a first communication mode to transmit a first predetermined signal to a communication device that designates a specific mode, and the communication device responds by issuing a second predetermined signal. The communicator executes a second communication mode to transmit a third predetermined signal to the communication device that requests a transmission of the first predetermined signal from the communication device, and upon receipt of the first predetermined signal from the communication device, transmits the second predetermined signal to the communication device. A controller controls the execution of either the first communication mode or the second communication mode upon initializing a communication with the communication device.

ACCESSION NUMBER:

2003:151895 USPATFULL

TITLE:

Activation of multiple xDSL modems with implicit

channel probe

INVENTOR(S):

Palm, Stephen, Tokyo, JAPAN

PATENT ASSIGNEE(S):

MATSUSHITA GRAPHIC COMMUNICATION SYSTEMS, INC., Tokyo,

JAPAN (3)

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 2003103559 A1 20030605 APPLICATION INFO.: US 2002-176338 A1 20020621 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-281813, filed on 31

## Mar 1999, PENDING

	Mai 1999, PENDING
	NUMBER DATE
PRIORITY INFORMATION:	US 1998-80310P 19980401 (60) US 1998-89850P 19980619 (60) US 1998-93669P 19980722 (60)
DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE:  NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: LINE COUNT:	PLACE, RESTON, VA, 20191 21 1
activated thromb Disclosed is a m regeneration at regeneration. Th therapeutically non-proteolytica Also disclosed i expansion of chr	cartilage growth with agonists of the non-proteolytically
CAS INDEXING IS AVAILAR ACCESSION NUMBER: TITLE:	2002:344424 USPATFULL Stimulation of cartilage growth with agonists of the
INVENTOR(S):	non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES Crowther, Roger S., League City, TX, UNITED STATES Stiernberg, Janet, Paris, TX, UNITED STATES Bergmann, John, Galveston, TX, UNITED STATES
PATENT ASSIGNEE(S):	Univ. of Texas System, Board of Regents, Austin, TX, UNITED STATES, 78701 (U.S. corporation)
	NUMBER KIND DATE
PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:	US 2002198154 A1 20021226 US 2002-50688 A1 20020116 (10) Continuation of Ser. No. US 2001-909348, filed on 19 Jul 2001, PENDING
	NUMBER DATE
PRIORITY INFORMATION: DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:	ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133 28
EXEMPLARY CLAIM: LINE COUNT: CAS INDEXING IS AVAILAB	

ANSWER 14 OF 39 USPATFULL on STN L2

TI

Stimulation of bone growth with thrombin peptide derivatives
Disclosed is a method of stimulating bone growth at a site in a subject AΒ

in need of osteoinduction. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:322044 USPATFULL

Stimulation of bone growth with thrombin peptide TITLE:

derivatives

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

> Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES

Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

Univ. of Texas System, Board of Regents, Austin, TX, PATENT ASSIGNEE(S):

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_

US 2002182205 A1 20021205 US 2002-50692 A1 20020116 PATENT INFORMATION:

APPLICATION INFO.: (10)

Continuation of Ser. No. US 2001-909122, filed on 19 RELATED APPLN. INFO.:

Jul 2001, PENDING

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION: US 2000-219300P 20000719 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 846 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 15 OF 39 USPATFULL on STN  $L_2$ 

тT Stimulation of bone growth with thrombin peptide derivatives

Disclosed is a method of stimulating bone growth at a site in a subject ΔR

in need of osteoinduction. The method comprises the step of

administering a therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:236005 USPATFULL

TITLE: Stimulation of bone growth with thrombin peptide

derivatives

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

> Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES

Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

The Board of Regents, The University of TX. System PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE US 2002128202 A1 20020912 US 2001-909122 A1 20010719 (9) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

PRIORITY INFORMATION: US 2000-219300P 20000719 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: 37 EXEMPLARY CLAIM: 1 LINE COUNT: 797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 39 USPATFULL on STN

TI Selective labeling and isolation of phosphopeptides and applications to

proteome analysis

A method for selective labeling of phosphate groups in natural and AB synthetic oligomers and polymers in the presence of chemically related groups such as carboxylic acid groups. The method is specifically applicable to biological oligomers and polymers, including phosphopeptides, phosphoproteins and phospholipids. In a specific embodiment, selective labeling of phosphate groups in proteins and peptides, for example, facilitates separation, isolation and detection of phosphoproteins and phosphopeptides in complex mixtures of proteins. Selective labeling can be employed to selectively introduce phosphate labels at phosphate groups in an oligomer or polymer, e.g., in a peptide or protein. Detection of the presence of the label, is used to detect the presence of the phosphate group in the oligomer or polymer. The method is useful for the detection of phosphoproteins or phosphopeptides. The phosphate label can be a colorimetric label, a radiolabel, a fluorescent or phosphorescent label, an affinity label or a linker group carrying a reactive group (or latent reactive group) that allows selective attachment of the oligomer or polymer (protein or peptide) to a phosphate label, to an affinity label or to a solid support. The method can be combined with well-known methods of mass spectrometry to detect and identify phosphopeptides and phosphoproteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:92781 USPATFULL

TITLE:

Selective labeling and isolation of phosphopeptides and

applications to proteome analysis

INVENTOR(S):

Aebersold, Ruedi, Mercer Island, WA, UNITED STATES

Zhou, Huilin, Seattle, WA, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-210972P 20000612 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GREENLEE WINNER and SULLIVAN, P.C., Suite 201, 5370

Manhattan Circle, Boulder, CO, 80303

NUMBER OF CLAIMS: 67 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 1709

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 17 OF 39 USPATFULL on STN

TI Stimulation of cartilage growth with agonists of the non-proteolytically activated thrombin receptor

AB Disclosed is a method of stimulating cartilage growth, repair or regeneration at a site in a subject in need of such growth, repair or regeneration. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2002:78716 USPATFULL ACCESSION NUMBER:

Stimulation of cartilage growth with agonists of the TITLE:

non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES

INVENTOR(S): Crowther, Roger S., League City, TX, UNITED STATES

Stiernberg, Janet, Paris, TX, UNITED STATES

Bergmann, John, Galveston, TX, UNITED STATES

The Board of Regents, The University of Texas System PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_\_\_ US 2002042373 A1 20020411 US 2001-909348 A1 20010719 (9) PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE \_\_\_\_\_\_

US 2000-219800P 20000720 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM: 1 LINE COUNT: 836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 18 OF 39 USPATFULL on STN L2

Method and apparatus for controlling the amount of power supplied to a ΤТ conditioning device

The method and apparatus are for controlling an amount of power supplied AB to a conditioning device acting on an actual value of a predetermined physical parameter within an area in relation to a setting signal. The method comprising steps of monitoring the setting signal to detect a change thereof, and when a changed setting signal is detected (i) determining a time period and a uniform amount of power required by the conditioning device to cause the actual value of the predetermined physical parameter to theoretically reach a new range of desired values corresponding to the changed setting signal, and (ii) establishing time-related upper and lower limit profiles HLV(t) and LLV(t) of the predetermined physical parameter for the time period determined in step (i). When the actual value of the predetermined physical parameter reaches one of the limit profiles HLV(t) and LLV(t), controlling the amount of power supplied to the conditioning device to cause the actual value of the predetermined physical parameter to follow substantially the limit profile HLV(t) or LLV(t) that has been reached for a remaining portion of the time period.

ACCESSION NUMBER: 2001:137698 USPATFULL

Method and apparatus for controlling the amount of TITLE:

power supplied to a conditioning device

INVENTOR(S): Thibeault, Pierre, Montreal, Canada

> Couture, Roland, Quebec City, Canada Handfield, Louis, Longueuil, Canada

PATENT ASSIGNEE(S): Hydro-Quebec, Montreal, Canada (non-U.S. corporation)

> NUMBER KIND DATE

\_\_\_\_\_\_

PATENT INFORMATION: US 6278909 B1 20010821 APPLICATION INFO.: US 1998-161706 19980929 (9)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Gordon, Paul P.
ASSISTANT EXAMINER: Garland, Steven R.
LEGAL REPRESENTATIVE: Foley & Lardner

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)

LINE COUNT: 1618

L2 ANSWER 19 OF 39 USPATFULL on STN

Method and apparatus for interrupt load balancing for powerPC processors Interrupts from an I/O subsystem are first directed to a single processor in a multiple superscalar processor data processing system. If an interrupt load on the processor is sufficiently high, the interrupt is sent (offloaded) to a second specific processor. The process continues throughout all superscalar processors in the data processing system and each processor builds interrupt prediction data corresponding to the interrupt load. A threshold counter may be added to the logic so offloading does not take place until a specified number of interrupts are queued within that specific processor, thus providing a fixed level of prediction data. Some processors may be left out of the offload string so they are not disturbed by an interrupt.

ACCESSION NUMBER: 2001:23505 USPATFULL

TITLE: Method and apparatus for interrupt load balancing for

powerPC processors

INVENTOR(S): Arndt, Richard Louis, Austin, TX, United States

Chen, Wen-Tzer Thomas, Austin, TX, United States

PATENT ASSIGNEE(S): International Business Machines Corporation, Armonk,

NY, United States (U.S. corporation)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Lefkowitz, Sumati

LEGAL REPRESENTATIVE: Van Leeuwen, Leslie A.Felsman, Bradley, Vaden, Gunter &

Dillon, LLP

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 528

L2 ANSWER 20 OF 39 USPATFULL on STN

TI DCE controlled V.8 bis negotiation

AB An extended V.8bis command sequence enables a DTE to configure a DCE for alternative configurations and for independent V.8bis protocol negotiations. The DCE can be configured by sending it an AT command sequence as part of an initialization string. In this way, legacy applications can use the full capabilities of modems without rewriting the legacy application code.

ACCESSION NUMBER: 2001:11661 USPATFULL

TITLE: DCE controlled V.8 bis negotiation

INVENTOR(S): Miller, Robert J., Raleigh, NC, United States

PATENT ASSIGNEE(S): Cirrus Logic, Inc., Austin, TX, United States (U.S.

corporation)

NUMBER KIND DATE US 6178199 B1 20010123 US 1997-877583 19970617 (8) PATENT INFORMATION:

APPLICATION INFO.: DOCUMENT TYPE: Utility FILE SEGMENT: Granted Pham, Chi H. PRIMARY EXAMINER: Bayard, Emmanuel ASSISTANT EXAMINER:

LEGAL REPRESENTATIVE: Violette, J. P., Rutkowski, Peter, Stewart, David L.

NUMBER OF CLAIMS: 2.2 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 30 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT:

ANSWER 21 OF 39 USPATFULL on STN  $L_2$ 

Method and apparatus for detection, classification and reduction of ΤI internal electrical faults in alternating current propulsion machinery using synchronous detection scheme

AΒ A winding fault detection system provides classification and identification of winding faults or winding malfunctions. The fault detection system provides signals to individual electronic switches for segmented primary windings each having an electrical phase and grouped into sub-phases which are individually switch into or out of an excitation supply or isolated through the electronic switching in response to signals from the winding fault detection system. Each primary winding forms an electrical member which includes a stator having a poly-phase winding, and there is a secondary electrical member magnetically coupled with the stator. Each primary has magnetic field sensors which detect phase angle and magnitudes of radial components of air gap flux by magnetic measurement probes between each secondary electrical member and each primary electrical member and derives an electrical signal for a component of air gap flux contributing to electromagnetic torque at each position of each stator's periphery. Additionally, the system instantaneously stores data continuously derived from the magnetic sensors and determines a hierarchy of fault detection schemes.

2000:61988 USPATFULL ACCESSION NUMBER:

Method and apparatus for detection, classification and TITLE:

reduction of internal electrical faults in alternating

current propulsion machinery using synchronous

detection scheme

Kuznetsov, Stephen B., New Castle, PA, United States INVENTOR(S): Power Superconductor Applications Corporation, AK, PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE US 6064172 20000516 US 1997-798250 19970211 (8) PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Martin, David LEGAL REPRESENTATIVE: Poff, Clifford A.

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 54 Drawing Figure(s); 53 Drawing Page(s)

LINE COUNT: 2013

ANSWER 22 OF 39 USPATFULL on STN L2

Compact fuzzy logic algorithm TΤ

A fuzzy logic algorithm utilizes a single rule to produce a varying AB output signal. A plurality of input signal values are received from a plurality of sensors. A predetermined combination of a plurality of

membership functions in the single fuzzy logic rule are defined in which a first instance of the predetermined combination based on a first set of inputs yields a first output signal defined by a first and second axis. A second instance of the predetermined combination based on a second set of inputs different from the first set of inputs yields a second output signal substantially identical to the first output signal, except the second output signal is shifted along one of the first and second axes. A controller produces digital output signals based on the first and second output signals to produce the varying output signal.

ACCESSION NUMBER:

1999:134227 USPATFULL

TITLE:

Compact fuzzy logic algorithm

INVENTOR(S):

Davis, Jr., Leighton Ira, Ann Arbor, MI, United States Dage, Gerhard Allan, Franklin, MI, United States Gurney, III, Edmund Joseph, Canton, MI, United States

Gurney, III, Edmund Joseph, Canton, MI, United States Bauer, Michael Bradley, Chicago, IL, United States Ford Global Technologies, Inc., Dearborn, MI, United

PATENT ASSIGNEE(S): Ford

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 5974350 19991026 US 1997-872887 19970611 (8)

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Cuchlinski, Jr., William A.

ASSISTANT EXAMINER: Beaulieu, Yonel

LEGAL REPRESENTATIVE:

Godwin, Paul K., May, Roger L.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

16 9

NUMBER OF DRAWINGS:

14 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 642

L2 ANSWER 23 OF 39 USPATFULL on STN

TI Externally field-controlled induction generator AB In an induction generator, an additional set of

In an induction generator, an additional set of stator windings is provided, separate from and secondary to the main stator windings upon which the generator's output voltage is generated and supplied to the load. This separate stator winding is provided for the purpose of supplying the generator with the reactive electrical power it needs to maintain the rotating stator field and supplying any reactive power needed by the load. Thus, there is no need to use a capacitor assembly, for supplying the reactive power needed by the generator. Currents are injected into this separate winding in such a way that only reactive power is supplied to the generator. Specifically, a power measuring circuit measures the power in the additional set of stator windings, and a power error signal is formed by algebraically adding the outputs of the power measuring circuit. The power error signal is further processed and supplied as a timing control signal for generating the injected currents, which are maintained 90 degrees out of phase with an excitation voltage curve.

ACCESSION NUMBER:

1999:85962 USPATFULL

TITLE:

INVENTOR(S):

Externally field-controlled induction generator Eisenhaure, David B., Cohasset, MA, United States Kirtley, Jr., James L., Brookline, MA, United States Lansberry, Geoffrey B., Hingham, MA, United States Donegan, Kevin J., Merrimack, NH, United States Rao, Gita P., Belmont, MA, United States

PATENT ASSIGNEE(S):

Satcon Technology Corporation, Cambridge, MA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5929612 19990727 US 1997-888347 APPLICATION INFO.: 19970703 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-472493, filed

on 7 Jun 1995, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Ramirez, Nestor PRIMARY EXAMINER: ASSISTANT EXAMINER: Ponomarenko, Nicholas

LEGAL REPRESENTATIVE: Conlin, David G., Daley, Jr., William J.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 19 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT:

ANSWER 24 OF 39 USPATFULL on STN  $L_2$ 

Method of characterizing feeds to catalytic cracking process units TI

The present invention is a method to determine the chemical AΒ

concentration of one or more of a number of the constituent classes of a feed to a catalytic cracking process. These constituent classes which are referred to as "lumps", include 14 different molecular types in 4 different boiling range fractions. A specific lump will include all individual molecular components which are expected to react in a similar way in the catalytic cracking unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:122272 USPATFULL

Method of characterizing feeds to catalytic cracking TITLE:

process units

INVENTOR(S): Perry, Bruce N., Flemington, NJ, United States

Brown, James Milton, Flemington, NJ, United States

Exxon Research and Engineering Company, Florham Park, PATENT ASSIGNEE(S):

NJ, United States (U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_ US 5817517 19981006 US 1997-918540 19970822 PATENT INFORMATION: APPLICATION INFO.: (8)

Continuation of Ser. No. US 1996-731040, filed on 8 Oct RELATED APPLN. INFO.:

1996, now abandoned which is a continuation of Ser. No.

US 1995-385257, filed on 8 Feb 1995, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Soderquist, Arlen Hantman, Ronald D. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 50 Drawing Figure(s); 18 Drawing Page(s)

LINE COUNT: 627

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 25 OF 39 USPATFULL on STN L2

TΙ Optical recording medium and method for eliminating berm buildup The invention discloses a method and an apparatus for creating an AB optical disc master by forming pits having ideal shapes and without berm buildup. These ideally shaped pits are improvements in the technology of disc mastering, due to the manufacturing and data playback advantages that are inherent in the ideally shaped pits. A disc substrate has a very thin partially reflective layer applied to the surface of the optical disc upon which data will be recorded. The substance used to make the partially reflective layer is normally considered opaque in more commonly occurring thicknesses. However, the partially reflective layer, is created to be so extremely thin that it becomes partially optically transparent. The partially reflective layer then has spin coated, thereon, an optically active lamina to enable the recording of

data on the disc by laser means in the form of pits. The pits are created by having a laser light focusing on both the partially reflective layer and the optically active lamina, both which react to the irradiation causing a pit to be formed. The resulting pit more often than not possesses a residual raised berm area surrounding the pit, in what is considered to be a less than ideal shape for a pit. The residual berm, however, is eliminated as disclosed in this application by an additional process and step of passing the recently recorded disc under a UV illumination source before application of any additional layer to the disc. An OD Master can be created by finally depositing a conductive and reflective lamina over the pitted active lamina. The invention is also useful in providing increased laser tracking. Here, the partially reflective layer provides increased signal to noise ratio, enhancing laser tracking in both the recording and playback modes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:42201 USPATFULL

TITLE: Optical recording medium and method for eliminating

berm buildup

INVENTOR(S): Cubit, Robert L., Westminister, CA, United States

Del Mar, Bruce E., Laguna Beach, CA, United States

PATENT ASSIGNEE(S): Del Mar Avionics, Irvine, CA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5741627 19980421 APPLICATION INFO.: US 1996-648532 19960515 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Angebranndt, Martin

LEGAL REPRESENTATIVE: English, W. D.

NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 9

NUMBER OF DRAWINGS: 22 Drawing Figure(s); 10 Drawing Page(s)

LINE COUNT: 765

AB

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 26 OF 39 USPATFULL on STN

TI Control apparatus for use in a dwelling

A controller that operates using two different processors is provided. Each processor performs certain predetermined functions. A control processor is responsible for switching AC power distribution and control, while a message processors is responsible for messaging. A polling scheme and arbitration logic prevent data transfers relating to these two processors from interfering with each other. A configurable interface allows many different types of appliances to attach to the system, and a serial multimode interface further enhances the configurability of the system.

ACCESSION NUMBER: 97:54551 USPATFULL

TITLE: Control apparatus for use in a dwelling INVENTOR(S): Stirk, Gary L., Arnold, MD, United States

Jamieson, III, John M., Saverna Park, MD, United States

Cowden, Rob L., Washington, DC, United States Prothro, Susan M., West River, MD, United States Owens, John S., West River, MD, United States

Mikkilineni, Krishna P., New Hope, MN, United States Zumsteg, Philip J., Minneapolis, MN, United States

Wacks, Kenneth P., Stoneham, MA, United States

PATENT ASSIGNEE(S): Building Technology Associates, Wilmington, DE, United

States (U.S. corporation)

NUMBER KIND DATE

-----

PATENT INFORMATION: US 5642101 19970624 APPLICATION INFO.: US 1993-109987 19930823 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-721328, filed on 21

Jul 1991, now abandoned which is a continuation of Ser. No. US 1990-560034, filed on 30 Jul 1990, now patented,

Pat. No. US 5218552

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Peng, John K. ASSISTANT EXAMINER: Hill, Andrew

LEGAL REPRESENTATIVE: Cushman Darby & Cushman, L.L.P.

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 103 Drawing Figure(s); 92 Drawing Page(s)

LINE COUNT: 1871

L2 ANSWER 27 OF 39 USPATFULL on STN

TI Apparatus and method for simultaneous measurement of carbon dioxide and water

To measure water vapor and carbon dioxide, a gas analyzer includes a light source, a reference flow cell, a sample flow cell, a detector and a source of gas. The light source, flow cells and detector are arranged so that the detector detects light transmitted from said light source through the flow cells. The flow cells have folded paths for the light. A reference signal is subtracted from a sample signal to obtain an independant variable. Carbon dioxide and air mixed with carbon dioxide are supplied as required. The carbon dioxide is supplied from a container through capillary tubes. Heat is applied to the tubes to control the flow rate. A signal representing gross concentration of the carbon dioxide as a dependant variable is obtained from said independent variable from an empirically determined polynomial.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 95:90744 USPATFULL

TITLE: Apparatus and method for simultaneous measurement of

carbon dioxide and water

INVENTOR(S): Eckles, Robert D., Malcolm, NE, United States

McDermitt, Dayle K., Lincoln, NE, United States Welles, Jonathan M., Lincoln, NE, United States

PATENT ASSIGNEE(S): Li-Cor, Inc., Lincoln, NE, United States (U.S.

corporation)

APPLICATION INFO.: US 1994-279959 19940725 (8)
RELATED APPLN. INFO.: Division of Ser. No. US 1992-843908, filed on 27 Feb

1992, now patented, Pat. No. US 5340987 which is a continuation-in-part of Ser. No. US 1991-670342, filed on 15 Mar 1991 pay patented. But No. US 5332001

on 15 Mar 1991, now patented, Pat. No. US 5332901

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fields, Carolyn E. ASSISTANT EXAMINER: Glick, Edward J. LEGAL REPRESENTATIVE: Carney, Vincent L.

NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 1309

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 28 OF 39 USPATFULL on STN

TI Method and apparatus for digital modulation using concurrent pulse

addition and subtraction

AB A method and apparatus for generating an output signal (616) having a pre-determined frequency shift relative to the frequency of a reference signal from a reference frequency generator (202) comprise a digital phase-locked loop (206) coupled to the reference signal for generating the output signal (616). The method and apparatus further comprise adding pulses to the reference signal in a pulse addition circuit (304), the pulses recurring at a first cyclical rate determined by a microprocessor (702). The method and apparatus further comprise concurrently subtracting pulses from the reference signal in a pulse subtraction circuit (302) at a second cyclical rate.

ACCESSION NUMBER:

94:16162 USPATFULL

TITLE:

Method and apparatus for digital modulation using

concurrent pulse addition and subtraction

INVENTOR (S):

Nanni, Peter, Algonquin, IL, United States

Hiben, Bradley M., Glen Ellyn, IL, United States Mutz, Leslie D., Barrington, IL, United States Motorola, Inc., Schaumburg, IL, United States (U.S.

PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE ----- ----- ---- ----- -----

PATENT INFORMATION:

US 5289141 19940222 US 1992-960150

APPLICATION INFO.:

Utility

DOCUMENT TYPE: FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Grimm, Siegfried H.

LEGAL REPRESENTATIVE:

Breeden, R. Louis, Berry, Thomas G., Collopy, Daniel R.

19921013 (7)

NUMBER OF CLAIMS:

20 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

9 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT:

ANSWER 29 OF 39 USPATFULL on STN L2

TI Control apparatus for use in a dwelling AΒ

The present invention provides a controller that operates using two different processors. Each processor performs certain predetermined functions. A control processor is responsible for switching AC power distribution and control, while a message processor is responsible for messaging. A polling scheme and arbitration logic prevent data transfers relating to these two processors from interfering with each other. A configurable interface allows many different types of appliances to attach to the system, and a serial multimode interface further enhances the configurability of the system.

ACCESSION NUMBER:

93:46994 USPATFULL

TITLE:

INVENTOR(S):

Control apparatus for use in a dwelling

Stirk, Gary L., Grasonville, MD, United States

Jamieson, III, John M., Severna Park, MD, United States

Cowden, Rob L., Washington, DC, United States Prothro, Susan M., West River, MD, United States Owens, John S., West River, MD, United States Mikkilineni, Krishna P., New Hope, MN, United States

Zumsteg, Philip J., Minneapolis, MN, United States Wacks, Kenneth P., Stoneham, MA, United States Smart House, L.P., Upper Marlboro, MD, United States

PATENT ASSIGNEE(S):

(U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5218552		19930608	
APPLICATION INFO.:	US 1990-560034		19900730	(7)
DOCUMENT TYPE:	Utility			

FILE SEGMENT:

Granted

PRIMARY EXAMINER:
ASSISTANT EXAMINER:

Lall, Parshotam S. Zanelli, Michael

LEGAL REPRESENTATIVE:

Cushman, Darby & Cushman

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

1 103 Drawing Figure(s); 92 Drawing Page(s)

LINE COUNT:

1970

L2 ANSWER 30 OF 39 USPATFULL on STN

TI Pulse ratio system

AB

A programmable system for providing a programmable ratio of output pulses to input pulses. The programmable system receives pulses from an electric power meter and outputs a programmable number of pulses representing a number of kilowatt hours consumed. Various electric power meter disk patterns can be processed by the programmable system. The programmable ratio can be applied via input pins and/or via an external memory.

ACCESSION NUMBER:

91:47276 USPATFULL

TITLE:

Pulse ratio system

INVENTOR(S):

Schlotterer, John C., 3479 Ivy La., Murrysville, PA,

United States 15668

Johnston, Paul M., 8900 Brookstone Ct., Raleigh, NC,

United States 27611

Rusnak, Mark F., P.O. Box 625, Irwin, PA, United States

15642

Pillage, Lawrence T., 405 Smokey Wood Dr., Pittsburgh,

PA, United States 15218

Byrd, Jr., Thomas M., 903 Washington St., Cary, NC,

United States 27511

NUMBER	KIND	DATE

PATENT INFORMATION:

US 5023822 19910611 US 1988-264582 19881031 (7)

APPLICATION INFO.:

Utility Granted

DOCUMENT TYPE: FILE SEGMENT:

Gruber, Felix D.

PRIMARY EXAMINER: LEGAL REPRESENTATIVE:

Staas & Halsey

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

6 1

NUMBER OF DRAWINGS:

13 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 488

L2 ANSWER 31 OF 39 USPATFULL on STN

TI Data base optimizer using most frequency values statistics

AB A method for more accurately estimating the time required to process a data base query using a selected index. A selected number of the most frequently occurring index key values (38) are collected during an index sequential scan. These most frequency occurring values are stored as percentage frequencies of occurrence in the data base system's catalog (42). Estimated access and processing times (NPAR, NPAS, NCPU) for a given query are calculated based on the stored frequencies where possible. Where the query's search criteria specify values other than

for a given query are calculated based on the stored frequencies where possible. Where the query's search criteria specify values other than the stored most frequently occurring values, those values are assumed to be uniformly distributed.

ACCESSION NUMBER:

90:72167 USPATFULL

TITLE:

Data base optimizer using most frequency values

statistics

INVENTOR(S):

Shibamiya, Akira, Los Altos, CA, United States Zimowski, Melvin R., San Jose, CA, United States International Business Machines Corporation, Armonk,

PATENT ASSIGNEE(S):

NY, United States (U.S. corporation)

NUMBER KIND DATE ------US 4956774 19900911 US 1988-239712 19880902 (7) PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Zache, Raulfe B. LEGAL REPRESENTATIVE: Garnett, Pryor A. NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 6 Drawing Figure(s); 4 Drawing Page(s) LINE COUNT: 956  $L_2$ ANSWER 32 OF 39 USPATFULL on STN TI Image processor with free flow pipeline bus AB

A digital image processing system has a pipeline bus for transferring addresses and data in parallel among the components of the system, which include an image memory, an address generator and an intensity processor. The pipeline bus includes a pipeline address bus, a pipeline data bus, and a master timing bus. Through the use of handshake signals, the pipeline bus permits a free flow of pipelined data among the components at whatever rate is necessary to complete the particular processing task. Image data is transferred in the form of N+N pixel subimage blocks which can be addressed using a single address.

ACCESSION NUMBER:

89:54652 USPATFULL

TITLE:
INVENTOR(S):

ΤI

AB

Image processor with free flow pipeline bus Brown, Dwight E., Pasadena, CA, United States Laughery, Mark S., Northridge, CA, United States

Laughery, Mark S., Northridge, CA, United States Lang, Thomas A., Tempe City, CA, United States

PATENT ASSIGNEE(S):

Minnesota Mining and Manufacturing Company, St. Paul,

MN, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: LINE COUNT:	US 4845663 US 1987-92719 Utility Granted Zache, Raulfe B. Sell, Donald M., 47 1 20 Drawing Figure			(7) Bauer, William D. Page(s)

Method and apparatus for use in processing signals

L2 ANSWER 33 OF 39 USPATFULL on STN

New dialogue is post-synchronized with guide track dialogue by using signal processing apparatus in which the analog guide track signal x.sub.1 (t) undergoes speech parameter measurement processing in a processor (43) to provide a speech parameter vector A(kT). The new dialogue signal x.sub.2 (t') is processed to give waveform data which can be stored on disc (25) and a speech parameter vector B(jT) from a parameter extraction processor (42). The variables k and j are data frame numbers, and T is an analysis interval. Some parameters of the vector B are used in process (48) to classify successive passages of the new dialogue signal into speech and silence, to produce classification data f(jT). The vectors A and B and the classification data are utilized in a time warp processor SBC2 to determine a time-warping function w(kT)

giving the values of j in terms of the values of k associated with the corresponding speech features, and thereby, indicating the amount of

expansion or compression of the waveform data of the new dialogue signal needed to align the time dependent features of the new dialogue signal with the corresponding features of the guide track signal. Editing instructions are generated in signal editor computer SBC1 from the w(kT) data, feature classification data, pitch data p(jT) and the data stream x.sub.2 (nD) so that the editing of x.sub.2 (nD) can be carried out by the computer SBC1 in which periods of silence or speech are lengthened or shortened to give the alignment. The edited data x.sub.2 (nD) is converted to analog by a converter unit (29), and low pass filtered to provide an audio output signal to be recorded as the synchronize new dialogue.

ACCESSION NUMBER:

86:31608 USPATFULL

TITLE:

Method and apparatus for use in processing signals

INVENTOR (S):

Bloom, Phillip J., London, England Marshall, Garth D., London, England

PATENT ASSIGNEE(S):

Wordfit Limited, London, England (non-U.S. corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 4591928	19860527	
	WO 8303483	19831013	
APPLICATION INFO.:	US 1985-736407	19850520	(6)
	WO 1983-GB87	19830323	
		19831122	PCT 371 date
		19831122	PCT 102(e) date
RELATED APPLN. INFO.:	Continuation of S	Ser. No. US 1983-	586226, filed on 22

NUMBER DATE ----- ----- ---- -----

Nov 1983, now abandoned

PRIORITY INFORMATION:

GB 1982-8376 19820323

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Canney, Vincent P.

LEGAL REPRESENTATIVE:

Fitch, Even, Tabin & Flannery

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

31 Drawing Figure(s); 22 Drawing Page(s)

LINE COUNT:

2249

L2ANSWER 34 OF 39 USPATFULL on STN

TI Method of adjusting circuit components

Disclosed are methods of controlling the adjustment of a machine-adjustable component in a circuit wherein a feedback factor relates a change in a monitor parameter to a compensating change in the value of the adjustable component; and wherein, by machine means, a value for the change in the monitor parameter is determined, a target value for the adjustable component is calculated from the monitor parameter change and the feedback factor, and the adjustable component is adjusted to substantially its target value.

ACCESSION NUMBER:

81:61964 USPATFULL

TITLE:

Method of adjusting circuit components

INVENTOR(S):

Lopresti, Philip V., Hopewell Township, Mercer County,

NJ, United States

PATENT ASSIGNEE(S):

Western Electric Co., Inc., New York, NY, United States

(U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE:	US 4300196 US 1975-613674 Utility		19811110 19750915	(5)

FILE SEGMENT: Granted

PRIMARY EXAMINER: Krass, Errol A.

LEGAL REPRESENTATIVE: Green, G. D., Kirk, D. J.

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 1346

L2 ANSWER 35 OF 39 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

AN AAE20159 peptide DGENE

The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is human thrombin peptide derivative which serves as a NPAR agonist.

ACCESSION NUMBER: AAE20159 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful for

treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131 28p

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Human thrombin peptide derivative #2.

L2 ANSWER 36 OF 39 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

AN AAE20158 peptide DGENE

The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is human thrombin peptide derivative which serves as a NPAR agonist.

ACCESSION NUMBER: AAE20158 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful for

treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131 28p

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Human thrombin peptide derivative #1.

L2 ANSWER 37 OF 39 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

AN AAE20157 peptide DGENE

The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is human thrombin peptide. The derivatives of thrombin peptide which serves as a NPAR agonist.

ACCESSION NUMBER: AAE20157 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful for

treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA)UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131 28p

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Human thrombin peptide.

L2 ANSWER 38 OF 39 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

AN AAE20156 peptide DGENE

The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is serine esterase conserved peptide. This sequence is present in the thrombin peptide derivatives which serve as a NPAR agonist.

ACCESSION NUMBER: AAE20156 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful for

treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131 28p

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Serine esterase conserved peptide #2.

L2 ANSWER 39 OF 39 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

AN AAE20155 peptide DGENE

AB The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of

non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is serine esterase conserved peptide. This sequence is present in the thrombin peptide derivatives which serve as a NPAR agonist.

ACCESSION NUMBER: AAE20155 peptide DGENE

TITLE:

Stimulating growth and repair of cartilage, useful for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor -

28p

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.
PATENT INFO: WO 2002007748 A2 20020131

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Serine esterase conserved peptide #1.

=> s cartillage growth or repair

L3 335034 CARTILLAGE GROWTH OR REPAIR

=> d his

(FILE 'HOME' ENTERED AT 10:48:05 ON 17 FEB 2004)

FILE 'MEDLINE, USPATFULL, DGENE, FSTA, WPIDS' ENTERED AT 10:48:46 ON 17 FEB 2004

L1 0 S NPAR ORNON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS
L2 39 S NPAR OR NON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS
L3 335034 S CARTILLAGE GROWTH OR REPAIR

=> s 12 and 13

L4 9 L2 AND L3

=> d l4 ti abs ibib tot

L4 ANSWER 1 OF 9 USPATFULL on STN

TI Stimulation of cartilage growth with agonists of the non-proteolytically activated thrombin receptor

Disclosed is a method of stimulating cartilage growth, repair or regeneration at a site in a subject in need of such growth, repair or regeneration. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:344424 USPATFULL

TITLE:

AΒ

Stimulation of cartilage growth with agonists of the

non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES

INVENTOR(S): Carney, I

Crowther, Roger S., League City, TX, UNITED STATES

Stiernberg, Janet, Paris, TX, UNITED STATES Bergmann, John, Galveston, TX, UNITED STATES

PATENT ASSIGNEE(S):

Univ. of Texas System, Board of Regents, Austin, TX,

UNITED STATES, 78701 (U.S. corporation) NUMBER KIND DATE PATENT INFORMATION: US 2002198154 A1 20021226 US 2002-50688 A1 20020116 (10) APPLICATION INFO.: Continuation of Ser. No. US 2001-909348, filed on 19 RELATED APPLN. INFO.: Jul 2001, PENDING NUMBER DATE US 2000-219800P 20000720 (60) PRIORITY INFORMATION: DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 862 CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 2 OF 9 USPATFULL on STN TT Stimulation of bone growth with thrombin peptide derivatives AB Disclosed is a method of stimulating bone growth at a site in a subject in need of osteoinduction. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 2002:322044 USPATFULL TITLE: Stimulation of bone growth with thrombin peptide derivatives INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S):

Univ. of Texas System, Board of Regents, Austin, TX,

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE -----US 2002182205 A1 20021205 US 2002-50692 A1 20020116 (10) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-909122, filed on 19

Jul 2001, PENDING

NUMBER DATE -----

PRIORITY INFORMATION:

US 2000-219300P 20000719 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: 46 EXEMPLARY CLAIM: 1 LINE COUNT: 846

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4ANSWER 3 OF 9 USPATFULL on STN

ΤI Stimulation of bone growth with thrombin peptide derivatives

AΒ Disclosed is a method of stimulating bone growth at a site in a subject in need of osteoinduction. The method comprises the step of administering a therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:236005 USPATFULL

TITLE: Stimulation of bone growth with thrombin peptide

derivatives

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES

Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S): The Board of Regents, The University of TX. System

(U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 2002128202 A1 20020912 US 2001-909122 A1 20010719 (9) APPLICATION INFO.:

> NUMBER DATE -----

US 2000-219300P 20000719 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 797

INVENTOR(S):

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 9 USPATFULL on STN L4

Stimulation of cartilage growth with agonists of the non-proteolytically TТ

activated thrombin receptor

Disclosed is a method of stimulating cartilage growth, repair AB or regeneration at a site in a subject in need of such growth, repair or regeneration. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:78716 USPATFULL

TITLE: Stimulation of cartilage growth with agonists of the

> non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES Crowther, Roger S., League City, TX, UNITED STATES Stiernberg, Janet, Paris, TX, UNITED STATES

Bergmann, John, Galveston, TX, UNITED STATES

PATENT ASSIGNEE(S): The Board of Regents, The University of Texas System

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 2002042373 A1 20020411 US 2001-909348 A1 20010719 (9) APPLICATION INFO.:

> NUMBER DATE -----

PRIORITY INFORMATION: US 2000-219800P 20000720 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 5 OF 9 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

Stimulating growth and repair of cartilage, useful for treating TΙ e.g. arthritis, by local administration of an agonist of

non-proteolytically activated thrombin receptor

AN AAE20159 peptide **DGENE** 

The invention relates to a method of stimulating growth and AB repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor ( NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is human thrombin peptide derivative which serves as a NPAR agonist.

ACCESSION NUMBER: AAE20159 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful

for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131 28p

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Human thrombin peptide derivative #2.

L4ANSWER 6 OF 9 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN Stimulating growth and repair of cartilage, useful for treating TI

e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor

AN AAE20158 peptide DGENE

AΒ The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor ( NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is human thrombin peptide derivative which serves as a NPAR agonist.

ACCESSION NUMBER: AAE20158 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful

for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002007748 A2 20020131

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]
DESCRIPTION: Human thrombin po Human thrombin peptide derivative #1.

```
L4
      ANSWER 7 OF 9 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
ΤI
      Stimulating growth and repair of cartilage, useful for treating
      e.g. arthritis, by local administration of an agonist of
       non-proteolytically activated thrombin receptor
AN
       AAE20157 peptide
                              DGENE
      The invention relates to a method of stimulating growth and
AB
       repair of cartilage. The method involves administering to the
      site, an agonist of non-proteolytically activated thrombin receptor (
      NPAR). The method is used in human or veterinary medicine for the
      treatment of arthritic joints and damage/loss of cartilage caused by
      traumatic injury. Also chondrocytes may be cultured in presence of
      NPAR agonist to provide cells for implantation at sites requiring
      growth/repair of cartilage. The present sequence is human
      thrombin peptide. The derivatives of thrombin peptide which serves as a
      NPAR agonist.
ACCESSION NUMBER: AAE20157 peptide
                                          DGENE
TITLE:
                  Stimulating growth and repair of cartilage, useful
                  for treating e.g. arthritis, by local administration of an
                  agonist of non-proteolytically activated thrombin receptor
                  Carney D H; Crowther R S; Stiernberg J; Bergmann J
INVENTOR:
PATENT ASSIGNEE:
                  (TEXA) UNIV TEXAS SYSTEM.
PATENT INFO:
                  WO 2002007748 A2 20020131
                                                           28p
APPLICATION INFO: WO 2001-US22668 20010719
PRIORITY INFO: US 2000-219800P 20000720
DOCUMENT TYPE:
                 Patent
LANGUAGE:
                  English
OTHER SOURCE:
                  2002-268953 [31]
DESCRIPTION:
                  Human thrombin peptide.
      ANSWER 8 OF 9 DGENE COPYRIGHT 2004 THOMSON DERWENT On STN
L4
TΤ
      Stimulating growth and repair of cartilage, useful for treating
      e.g. arthritis, by local administration of an agonist of
      non-proteolytically activated thrombin receptor
ΔN
      AAE20156 peptide
                              DGENE
AB
      The invention relates to a method of stimulating growth and
      repair of cartilage. The method involves administering to the
      site, an agonist of non-proteolytically activated thrombin receptor (
      NPAR). The method is used in human or veterinary medicine for the
      treatment of arthritic joints and damage/loss of cartilage caused by
      traumatic injury. Also chondrocytes may be cultured in presence of
      NPAR agonist to provide cells for implantation at sites requiring
      growth/repair of cartilage. The present sequence is serine
      esterase conserved peptide. This sequence is present in the thrombin
      peptide derivatives which serve as a NPAR agonist.
ACCESSION NUMBER: AAE20156 peptide
                                          DGENE
TITLE:
                  Stimulating growth and repair of cartilage, useful
                  for treating e.g. arthritis, by local administration of an
                  agonist of non-proteolytically activated thrombin receptor
INVENTOR:
                  Carney D H; Crowther R S; Stiernberg J; Bergmann J
PATENT ASSIGNEE:
                 (TEXA) UNIV TEXAS SYSTEM.
PATENT INFO:
                  WO 2002007748 A2 20020131
                                                           28p
APPLICATION INFO: WO 2001-US22668 20010719
PRIORITY INFO: US 2000-219800P 20000720
DOCUMENT TYPE:
                 Patent
LANGUAGE:
                 English
OTHER SOURCE:
                2002-268953 [31]
DESCRIPTION:
                 Serine esterase conserved peptide #2.
L4
      ANSWER 9 OF 9 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
      Stimulating growth and repair of cartilage, useful for treating
TI
      e.g. arthritis, by local administration of an agonist of
```

non-proteolytically activated thrombin receptor

**DGENE** 

AN

AAE20155 peptide

The invention relates to a method of stimulating growth and repair of cartilage. The method involves administering to the site, an agonist of non-proteolytically activated thrombin receptor (NPAR). The method is used in human or veterinary medicine for the treatment of arthritic joints and damage/loss of cartilage caused by traumatic injury. Also chondrocytes may be cultured in presence of NPAR agonist to provide cells for implantation at sites requiring growth/repair of cartilage. The present sequence is serine esterase conserved peptide. This sequence is present in the thrombin peptide derivatives which serve as a NPAR agonist.

ACCESSION NUMBER: AAE20155 peptide DGENE

TITLE: Stimulating growth and repair of cartilage, useful

for treating e.g. arthritis, by local administration of an agonist of non-proteolytically activated thrombin receptor

28p

INVENTOR: Carney D H; Crowther R S; Stiernberg J; Bergmann J

PATENT ASSIGNEE: (TEXA)UNIV TEXAS SYSTEM.
PATENT INFO: WO 2002007748 A2 20020131

APPLICATION INFO: WO 2001-US22668 20010719 PRIORITY INFO: US 2000-219800P 20000720

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-268953 [31]

DESCRIPTION: Serine esterase conserved peptide #1.

=> s tp508

L5 25 TP508

=> d l5 ti abs ibib tot

L5 ANSWER 1 OF 25 MEDLINE on STN

TI Effects of thrombin peptides and thrombin on the release of TGF-beta and VEGF from human fibroblasts.

OBJECTIVE: To explore the effect of thrombin peptide 508 (TP508) AB and thrombin on the release of TGF-beta and VEGF from cultured human fibroblasts (Lu13) in vitro. METHODS: TP508 and thrombin in different concentrations were added to the confluent cultured Lu13 and incubated for 8 to 24 hours. Then the supernatant was obtained by centrifugation, and the TGF-beta 1, TGF-beta 2 and VEGF contents were measured by ELISA. RESULTS: TGF-beta 1 release from Lu13 was markedly increased by thrombin, but decreased obviously by TP508 (P < 0.05). A combinedation application of TP508 and thrombin showed a synergistic effect to the release of TGF-beta(1) from Lu13. The release of TGF-beta(2) was also increased (P < 0.05) after thrombin treatment, while slightly decreased when incubated with 100 ug/ml of TP508 (P > 0.05). VEGF release was also stimulated by thrombin and inhibited by TP508. CONCLUSION: The release of TGF-beta 1, TGF-beta 2 and VEGF from Lu13 could be stimulated by thrombin, and inhibited by TP508 which might be beneficial to reducing scar formation and enhancing the healing quality of the wound.

ACCESSION NUMBER: 2003606863 IN-PROCESS

DOCUMENT NUMBER: PubMed ID: 14687514

TITLE: Effects of thrombin peptides and thrombin on the release of

TGF-beta and VEGF from human fibroblasts.

AUTHOR: Huang Yue-Sheng; Yang Zhong-Cheng

CORPORATE SOURCE: Institute of Burn Research, Southwestern Hospital, State

Key Laboratory of Trauma, Burns and Combined Injury, The Third Military Medical University, Chongqing 400038 P.R.

China.

SOURCE: Zhonghua shao shang za zhi = Zhonghua shaoshang zazhi =

Chinese journal of burns, (2003 Nov) 19 Suppl 5-7.

Journal code: 100959418. ISSN: 1009-2587.

PUB. COUNTRY: China

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

Chinese

FILE SEGMENT: ENTRY DATE:

IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals

Entered STN: 20031223

Last Updated on STN: 20031223

 $L_5$ ANSWER 2 OF 25 MEDLINE on STN

PAR1-dependent and independent increases in COX-2 and PGE2 in human TIcolonic myofibroblasts stimulated by thrombin.

Subepithelial myofibroblast-derived prostaglandin E(2) (PGE(2)) regulates AB epithelial chloride secretion in the intestine. Thrombin is elevated in inflammatory conditions of the bowel. Therefore, we sought to determine a role for thrombin in regulating PGE(2) synthesis by colonic myofibroblasts. Incubation of cultured CCD-18Co colonic myofibroblasts with thrombin, the proteinase-activated receptor 1 (PAR(1))-activating peptide (Cit-NH(2)), and peptides corresponding to 2 noncatalytic regions of thrombin (TP367 and TP508) for 18 h increased both cyclooxygenase (COX)-2 expression (immunocytochemistry) and PGE(2) synthesis (enzyme immunoassay). Inhibition of thrombin by D-Phe-Pro-Arg-chloromethylketone (PPACK) did not significantly reduce PGE(2) synthesis, which remained elevated compared with control. We also investigated the basic fibroblast growth factor (bFGF) dependence of thrombin-induced PGE(2) elevations. Recombinant human bFGF concentration dependently increased PGE(2) synthesis, and a bFGF neutralizing antibody inhibited PGE(2) synthesis induced by TP367 and TP508 (approximately 40%) and by thrombin (approximately 20%) (but not Cit-NH(2)). Thrombin, therefore, upregulates COX-2-derived PGE(2) synthesis by both catalytic cleavage of PAR(1) and bFGF-dependent noncatalytic activity. This presents a novel mechanism by which intestinal myofibroblasts might regulate epithelial chloride secretion.

ACCESSION NUMBER:

2003159038 MEDLINE

DOCUMENT NUMBER:

22562466 PubMed ID: 12505789

TITLE:

PAR1-dependent and independent increases in COX-2 and PGE2 in human colonic myofibroblasts stimulated by thrombin. Seymour Michelle L; Zaidi Nosheen F; Hollenberg Morley D;

AUTHOR:

MacNaughton Wallace K

CORPORATE SOURCE:

Mucosal Inflammation Research Group, University of Calgary,

Calgary, Alberta, Canada T2N 4N1.

SOURCE:

AMERICAN JOURNAL OF PHYSIOLOGY. CELL PHYSIOLOGY, (2003 May)

284 (5) C1185-92.

Journal code: 100901225. ISSN: 0363-6143.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200305

ENTRY DATE:

Entered STN: 20030406

Last Updated on STN: 20030522 Entered Medline: 20030521

L5 ANSWER 3 OF 25 MEDLINE on STN

TΙ Controlled release of an osteogenic peptide from injectable biodegradable polymeric composites.

Poly(D,L-lactic-co-glycolic acid)/poly(ethylene glycol) (PLGA/PEG) blend AB microparticles loaded with the osteogenic peptide TP508 were added to a mixture of poly(propylene fumarate) (PPF), poly(propylene fumarate)-diacrylate (PPF-DA), and sodium chloride (NaCl) for the fabrication of PPF composite scaffolds that could allow for tissue ingrowth as well as for the controlled release of TP508 when implanted in an orthopedic defect site. In this study, PPF composites were fabricated and the in vitro release kinetics of TP508 were determined. TP508 loading within the PLGA/PEG microparticles, PEG content within the PLGA/PEG microparticles, the microparticle content of the PPF composite polymer component, and the leachable porogen initial mass percent of the PPF composites were varied according to a fractional

factorial design and the effect of each variable on the release kinetics was determined for up to 28 days. Each composite formulation released TP508 with a unique release profile. The initial release (release through day 1) of the PLGA/PEG microparticles was reduced upon inclusion in the PPF composite formulations. Day 1 normalized cumulative mass release from  $\overrightarrow{PPF}$  composites ranged from 0.14+/-0.01 to 0.41+/-0.01, whereas the release from PLGA/PEG microparticles ranged from 0.31+/-0.02 to 0.58+/-0.01. After 28 days, PPF composites released 53+/-4% to 86+/-2%of the entrapped peptide resulting in cumulative mass releases ranging from 0.14+/-0.01 microg **TP508**/mm(3) scaffold to 2.46+/-0.05microg TP508/mm(3) scaffold. The results presented here demonstrate that PPF composites can be used for the controlled release of TP508 and that alterations in the composite's composition can lead to modulation of the TP508 release kinetics. These composites can be used to explore the effects varied release kinetics and dosages on the formation of bone in vivo.

Copyright 2002 Elsevier Science B.V. ACCESSION NUMBER: 2003004378 MEDLINE

ACCESSION NUMBER: 20030043/0 MEDITINE

DOCUMENT NUMBER: 22356120 PubMed ID: 12468217

TITLE: Controlled release of an osteogenic peptide from injectable

biodegradable polymeric composites.

AUTHOR: Hedberg Elizabeth L; Tang Andrew; Crowther Roger S; Carney

Darrell H; Mikos Antonios G

CORPORATE SOURCE: Department of Bioengineering, Rice University, PO Box 1892,

MS-142, Houston, TX 77251-1892, USA.

CONTRACT NUMBER: R01-AR44381 (NIAMS)

R01-DE13031 (NIDCR) T32-GM08362 (NIGMS)

SOURCE: JOURNAL OF CONTROLLED RELEASE, (2002 Dec 5) 84 (3) 137-50.

Journal code: 8607908. ISSN: 0168-3659.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Space Life Sciences

ENTRY MONTH: 200306

ENTRY DATE: Entered STN: 20030105

Last Updated on STN: 20030628 Entered Medline: 20030627

L5 ANSWER 4 OF 25 MEDLINE on STN

TI Effects of thrombin peptides on wound healing and proliferation and migration of normal human epidermal keratinocyte (NHEK).

OBJECTIVE: To define the effects of thrombin peptides on wound healing and AB NHEK proliferation and migration. METHODS: A wound model was made with four 1.5 cm circular full thickness dermal excisions on the back of each Spraque-Dawley rat. 0.1 microgram (40 microliter) TP508 was applied to each circular excisional wound in 9 rats, the other 9 received saline only. Wound area was calculated with JAVA Jandel and IMAGE PRO software. NHEK945 proliferation was assessed by MTT assay and direct cell count with a Coulter Counter. Cell migration was determined by 48-well Boyden Chamber. Cells migrated onto the lower surface of the filter were assessed by a Chemi Imager 4000 Image Analyzer and expressed as spot density. RESULTS: Wound area in rats treated with TP508 was 73.7% and 45.4% of saline control on day 7 and 14, respectively. proliferation was accelerated after adding thrombin and TP508. The spot density of migrated cells was 76.7 plus minus 13.8 in medium alone. After adding 1 microgram/ml of thrombin and 10 microgram/ml of TP508, the spot density was 104.4 plus minus 12.2 and 109.4 plus minus 14.6, respectively. CONCLUSION: Results of this study suggest that both thrombin and TP508 have significant actions on wound healing and NHEK proliferation and migration, which is important in wound repair.

ACCESSION NUMBER: 2002344571 MEDLINE

DOCUMENT NUMBER: 21866780 PubMed ID: 11876838

Effects of thrombin peptides on wound healing and TITLE:

proliferation and migration of normal human epidermal

keratinocyte (NHEK).

AUTHOR: Huang Y; Yang Z; Carney D

Institute of Burn Research, Southwestern Hospital, Third CORPORATE SOURCE:

Military Medical University, Chongqing 400038.

SOURCE: Zhonghua Shao Shang Za Zhi, (2000 Feb) 16 (1) 26-9.

Journal code: 100959418. ISSN: 1009-2587.

PUB. COUNTRY: China

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Chinese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200207

Entered STN: 20020629 ENTRY DATE:

> Last Updated on STN: 20020713 Entered Medline: 20020712

L5 ANSWER 5 OF 25 MEDLINE on STN

Thrombin peptide, TP508, stimulates angiogenic responses in ΤI animal models of dermal wound healing, in chick chorioallantoic membranes, and in cultured human aortic and microvascular endothelial cells.

AB The alpha-thrombin peptide, TP508, accelerates the healing of full-thickness wounds in both normal and ischemic skin. In wounds treated with TP508, a pattern of increased vascularization is consistently observed both grossly and microscopically when compared to wounds treated with saline. One possible mechanism by which the peptide accelerates wound healing is by promoting revascularization of granulation tissue at the injured site. To evaluate the angiogenic potential of TP508, the peptide was tested in the chick embryo chorioallantoic membrane (CAM), where it increased the density and size of CAM blood vessels relative to controls. Additionally, TP508 stimulated chemokinesis and chemotaxis in a dose-dependent fashion in cultured human aortic and human microvascular endothelial cells. Taken together, these in vivo and in vitro data support an angiogenic role for TP508 in wound healing. A working model is presented to explain how this 23-amino-acid peptide, which lacks proteolytic activity, is generated during wound healing and contributes to the nonproteolytic functions associated with alpha-thrombin during tissue repair.

2002157334 ACCESSION NUMBER: MEDLINE

DOCUMENT NUMBER: 21886336 PubMed ID: 11888680

TITLE: Thrombin peptide, TP508, stimulates angiogenic

responses in animal models of dermal wound healing, in chick chorioallantoic membranes, and in cultured human

aortic and microvascular endothelial cells.

AUTHOR: Norfleet A M; Bergmann J S; Carney D H

CORPORATE SOURCE: Chrysalis BioTechnology, Inc., 2200 Market Street, Suite

600, Galveston, TX 77550, USA.

GENERAL PHARMACOLOGY, (2000 Nov) 35 (5) 249-54. Ref: 26 Journal code: 7602417. ISSN: 0306-3623. SOURCE:

PUB. COUNTRY: England: United Kingdom

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200206

ENTRY DATE: Entered STN: 20020313

> Last Updated on STN: 20020620 Entered Medline: 20020619

L5 ANSWER 6 OF 25 MEDLINE on STN

An experimental study of the effects of thrombin receptor activating TT peptide (TP508) on healing of ischemic wound and flap survival in rats.

AR OBJECTIVE: To investigate the effects of the thrombin receptor activating peptide (TP508) on healing of ischemic wound and flap survival in rats. METHODS: Sixty-six Sprague-Dawley rats were employed as the model. On the back of the rats, three kinds of wound and flap were made to establish four groups as follows: partial ischemic wound in 16, full ischemic wound in 16, routine wound in 18 and flap in 16 rats. Each group was further divided into TP508 treating group and isotonic saline control group. The total and necrotic areas of the wounds and flaps were daplicated on acetate papers and calculated with a computer on the 3rd, 7th, 10th and 14th post-operation days (PODs). RESULTS: In routine wounds, the ischemic wound area treated by TP508 was 73.7% and 45.4% in saline control groups on 7 and 14 (PODs), respectively. While in the flap model, the necrotic flap area treated by TP508 was 80.4% and 56.8% in control groups on 7 and 14 (PODs), respectively. CONCLUSION: TP508 could accelerate healing of ischemic wound and improve flap survival in rats.

ACCESSION NUMBER: 2002125188 MEDLINE

DOCUMENT NUMBER: 21849128 PubMed ID: 11859609

An experimental study of the effects of thrombin receptor TITLE:

activating peptide (TP508) on healing of ischemic

wound and flap survival in rats.

Huang Y; Yang Z; Li A AUTHOR:

Institute of Burn Research, Southwestern Hospital, Third CORPORATE SOURCE:

Military Medical University, Chongqing 400038, P. R. China. Zhonghua Shao Shang Za Zhi, (2001 Dec) 17 (6) 339-41.

SOURCE:

Journal code: 100959418. ISSN: 1009-2587.

PUB. COUNTRY: China

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Chinese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200205

ENTRY DATE: Entered STN: 20020226

> Last Updated on STN: 20020508 Entered Medline: 20020507

T.5 ANSWER 7 OF 25 MEDLINE on STN

TIThrombin peptide TP508 accelerates closure of dermal excisions in animal tissue with surgically induced ischemia.

AR TP508 is a synthetic peptide corresponding to amino acids 508 through 530 of human prothrombin. We previously demonstrated that a single topical application of TP508 stimulates revascularization and healing of acute incisional and excisional wounds in normal, healthy rat skin. To determine if TP508 would enhance wound healing in ischemic skin, we used bipedicle flaps, cranially based flaps, and free grafts to surgically create ischemic regions on the backs of rats. Full-thickness, circular excisions were made within the flaps or grafts and immediately treated with a single application of saline +/-TP508 (0.1 microg/wound). Compared to wound closure in normal skin, ischemic skin wounds exhibited delayed closure, and the length of delay correlated with the degree of surgically induced ischemia. TP508 significantly accelerated closure in both normal and ischemic skin, resulting in closure rates that were increased within the first 7 days of wounding by 30% in normal tissue and bipedicle flaps, 50% in cranially based flaps, and 225% in free grafts. Moreover, in both flap models, TP508 restored the rate of closure to a rate approximating the control rate observed in normal skin. Histological comparisons of wound tissue from normal skin and cranially based flaps showed that ischemia reduced early recruitment of inflammatory cells at day 1 but increased inflammatory cell numbers in wound beds at day 14. TP508 treatment of ischemic flap wounds significantly increased early inflammatory cell recruitment and restored the normal rapid resolution of the inflammatory phase. In addition, at day 7, TP508-treated wounds appeared to have an increased number of large functional blood vessels compared to saline controls. These studies

support the potential efficacy of TP508 in treating ischemic wounds in humans.

ACCESSION NUMBER: 2001285509 MEDLINE

DOCUMENT NUMBER: 21221250 PubMed ID: 11208179

TITLE: Thrombin peptide TP508 accelerates closure of

dermal excisions in animal tissue with surgically induced

ischemia.

AUTHOR: Norfleet A M; Huang Y; Sower L E; Redin W R; Fritz R R;

Carney D H

CORPORATE SOURCE: Department of Human Biological Chemistry and Genetics, The

University of Texas Medical Branch, 301 University Blvd.,

Galveston, TX 77555-0645, USA.

CONTRACT NUMBER: R44 DK53580 (NIDDK)

SOURCE: WOUND REPAIR AND REGENERATION, (2000 Nov-Dec) 8 (6) 517-29.

Journal code: 9310939. ISSN: 1067-1927.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 20010702

Last Updated on STN: 20010702 Entered Medline: 20010628

L5 ANSWER 8 OF 25 MEDLINE on STN

TI Acceleration of full-thickness wound healing in normal rats by the synthetic thrombin peptide, **TP508**.

Thrombin is an essential factor in hemostasis, inflammation, and tissue AB repair. The synthetic thrombin peptide, TP508, binds to high-affinity thrombin receptors and mimics cellular effects of thrombin at sites of tissue injury. Treatment of full-thickness excisional wounds in normal rats with a single topical application of 0.1 microg TP508 (14 pmol/cm2) reproducibly accelerates wound closure, yielding wounds that on average close 39% more than controls by day 7 (p < 0.001). Wounds treated with 1.0 microg TP508 are 35% and 43% (p < 0.001) smaller than controls on day 7 and 10, respectively. rate of closure is approximately 40% greater in TP508-treated than vehicle-treated wounds (20 versus 14 mm2/day) and remains higher through day 7. Breaking strength after closure is slightly greater (15-23%) in wounds treated with TP508 than with saline alone. Histologic comparisons show that TP508 enhances recruitment of inflammatory cells to the wound site within 24 hours post-injury. TP508 treatment also augments revascularization of injured tissue, as evidenced at day 7 by the larger size of functional vessels in the granulation tissue and by the directed development of blood vessels to These studies raise the possibility that TP508 may be clinically useful in management of open wounds.

ACCESSION NUMBER: 2000402971 MEDLINE

DOCUMENT NUMBER: 20345355 PubMed ID: 10886811

TITLE: Acceleration of full-thickness wound healing in normal rats

by the synthetic thrombin peptide, TP508.

AUTHOR: Stiernberg J; Norfleet A M; Redin W R; Warner W S; Fritz R

R; Carney D H

CORPORATE SOURCE: Department of Human Biological Chemistry and Genetics, The

University of Texas Medical Branch, Galveston, Texas

77555-0645, USA.

CONTRACT NUMBER: DK-25807 (NIDDK)

GM-475472 (NIGMS)

SOURCE: WOUND REPAIR AND REGENERATION, (2000 May-Jun) 8 (3) 204-15.

Journal code: 9310939. ISSN: 1067-1927.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

TITLE:

Therapeutic and cosmetic uses of heparanases

INVENTOR (S):

Ilan, Neta, Rehovot, ISRAEL

Vlodavsky, Israel, Mevaseret Zion, ISRAEL Yacoby-Zeevi, Oron, Moshav Bizaron, ISRAEL

Pecker, Iris, Rishon LeZion, ISRAEL Feinstein, Elena, Rehovot, ISRAEL

NUMBER KIND -----US 2003161823 A1 20030828 US 2003-341582 A1 20030114 PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

(10) Continuation-in-part of Ser. No. US 2001-988113, filed on 19 Nov 2001, PENDING Continuation of Ser. No. US

2001-776874, filed on 6 Feb 2001, PENDING Continuation of Ser. No. US 1999-258892, filed on 1 Mar 1999,

ABANDONED Continuation-in-part of Ser. No. WO 1998-US17954, filed on 31 Aug 1998, PENDING

Continuation-in-part of Ser. No. WO 2001-IL830, filed

on 5 Sep 2001, UNKNOWN

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: G.E. EHRLICH (1995) LTD., c/o ANTHONY CASTORINA, SUITE 207, 2001 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA. 22202

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

49 Drawing Page(s)

LINE COUNT: 7437

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

**L**5 ANSWER 11 OF 25 USPATFULL on STN

ΤI Stimulation of cartilage growth with agonists of the non-proteolytically

activated thrombin receptor

Disclosed is a method of stimulating cartilage growth, repair or AΒ regeneration at a site in a subject in need of such growth, repair or regeneration. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

INVENTOR(S):

2002:344424 USPATFULL

TITLE:

Stimulation of cartilage growth with agonists of the

non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Stiernberg, Janet, Paris, TX, UNITED STATES

Bergmann, John, Galveston, TX, UNITED STATES

PATENT ASSIGNEE(S):

Univ. of Texas System, Board of Regents, Austin, TX,

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE US 2002198154 A1 20021226 US 2002-50688 A1 20020116 PATENT INFORMATION: APPLICATION INFO.: (10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-909348, filed on 19

Jul 2001, PENDING

NUMBER DATE

**---**PRIORITY INFORMATION: US 2000-219800P 20000720 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA LEGAL REPRESENTATIVE:

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 862

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 12 OF 25 USPATFULL on STN

Methods of therapy with thrombin derived peptides ΤI

The present invention relates to a method for promoting cardiac tissue AB repair comprising administering to the cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide and/or inhibiting or reducing vascular occlusion or restenosis. The invention also relates to methods of stimulating revascularization. In yet another embodiment, the invention relates to the use of thrombin derivative peptides in the manufacture of a medicament for the methods described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:330250 USPATFULL

TITLE: Methods of therapy with thrombin derived peptides INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES Univ. of Texas System, Board of Regents, Austin, TX, PATENT ASSIGNEE(S):

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.: US 2002187933 A1 20021212 US 2002-50611 A1 20020116 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-904090, filed on 12

Jul 2001, PENDING

NUMBER DATE -----

US 2000-217583P 20000712 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA LEGAL REPRESENTATIVE:

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: 28 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 716

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 13 OF 25 USPATFULL on STN

Stimulation of bone growth with thrombin peptide derivatives ΤI

Disclosed is a method of stimulating bone growth at a site in a subject AB in need of osteoinduction. The method comprises the step of

administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:322044 USPATFULL

TITLE: Stimulation of bone growth with thrombin peptide

derivatives

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES Yang, Jinping, Galveston, TX, UNITED STATES

Redin, William R., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S): Univ. of Texas System, Board of Regents, Austin, TX,

UNITED STATES, 78701 (U.S. corporation) NUMBER KIND DATE ----- -----US 2002182205 A1 20021205 US 2002-50692 A1 20020116 PATENT INFORMATION: APPLICATION INFO.: (10)Continuation of Ser. No. US 2001-909122, filed on 19 RELATED APPLN. INFO.: Jul 2001, PENDING NUMBER DATE -----PRIORITY INFORMATION: US 2000-219300P 20000719 (60) DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 846 CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 14 OF 25 USPATFULL on STN TIStimulation of bone growth with thrombin peptide derivatives AB Disclosed is a method of stimulating bone growth at a site in a subject in need of osteoinduction. The method comprises the step of administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site. CAS INDEXING IS AVAILABLE FOR THIS PATENT. 2002:236005 USPATFULL ACCESSION NUMBER: TITLE: Stimulation of bone growth with thrombin peptide

derivatives

INVENTOR(S):

Carney, Darrell H., Dickinson, TX, UNITED STATES Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S):

The Board of Regents, The University of TX. System

(U.S. corporation)

UMBER KINI	DATE
2128202 A1	20020912
1-909122 A1	20010719 (9)
	2128202 A1

NUMBER DATE -----

PRIORITY INFORMATION:

US 2000-219300P 20000719 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

37

LINE COUNT:

797 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1.5 ANSWER 15 OF 25 USPATFULL on STN

TIMethods of therapy with thrombin derived peptides

AΒ The present invention relates to a method for promoting cardiac tissue repair comprising administering to the cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide and/or inhibiting or reducing vascular occlusion or restenosis. The invention also relates to methods of stimulating revascularization. In yet another

embodiment, the invention relates to the use of thrombin derivative peptides in the manufacture of a medicament for the methods described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:119864 USPATFULL

TITLE: INVENTOR(S): Methods of therapy with thrombin derived peptides Carney, Darrell H., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S):

The Board of Regents, The University of Texas System

(U.S. corporation)

NUMBER KIND DATE ------

PATENT INFORMATION: APPLICATION INFO.:

US 2002061852 A1 20020523 US 2001-904090 A1 20010712 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-217583P 20000712 (60)

Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT: 683

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 16 OF 25 USPATFULL on STN L5

TI Stimulation of cartilage growth with agonists of the non-proteolytically

activated thrombin receptor

Disclosed is a method of stimulating cartilage growth, repair or AΒ regeneration at a site in a subject in need of such growth, repair or

regeneration. The method comprises the step of administering a

therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

INVENTOR(S):

2002:78716 USPATFULL

TITLE:

Stimulation of cartilage growth with agonists of the

non-proteolytically activated thrombin receptor

Carney, Darrell H., Dickinson, TX, UNITED STATES Crowther, Roger S., League City, TX, UNITED STATES

Stiernberg, Janet, Paris, TX, UNITED STATES Bergmann, John, Galveston, TX, UNITED STATES

PATENT ASSIGNEE(S):

The Board of Regents, The University of Texas System

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 2002042373 A1 20020411 US 2001-909348 A1 20010719 (9)

APPLICATION INFO.:

NUMBER DATE -----

PRIORITY INFORMATION: US 2000-219800P 20000720 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 17 OF 25 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

Promoting healing of chronic dermal skin ulcer such as diabetic ulcer, on TΙ a subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin receptor -

AN ABP72757 Peptide DGENE

The present sequence is that of a preferred human thrombin-derived AB peptide of the invention that is based on prothrombin amino acid residues 508-530. It is denoted TP508. The peptide acts as an agonist of the non-proteolytically activated thrombin receptor and has antiulcer activity. In an example from the invention, TP508 was shown to accelerate the healing of chronic diabetic ulcers and to increase the percentage of ulcer closure. The antiulcer peptides of the invention can be used to treat a chronic dermal skin ulcer, especially a diabetic ulcer, decubitus ulcer, venous stasis ulcer or an arterial ulcer on a human, a companion animal, farm animal or laboratory animal. The peptides are inexpensive to produce and cause few, if any, side effects.

ACCESSION NUMBER: ABP72757 Peptide **DGENE** 

TITLE: Promoting healing of chronic dermal skin ulcer such as

> diabetic ulcer, on a subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin

> > 19p

receptor -

INVENTOR: Carney D H

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM. PATENT INFO: WO 2003013569 A2 20030220

APPLICATION INFO: WO 2002-US1151 20020116 PRIORITY INFO: US 2001-308198P 20010727

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2003-289898 [28]

DESCRIPTION: Antiulcer peptide TP508 derived from human

thrombin.

ANSWER 18 OF 25 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN L5

Promoting healing of chronic dermal skin ulcer such as diabetic ulcer, on TIa subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin receptor -

ΔM ABP72755 Peptide **DGENE** 

ΔR The present sequence is that of a human thrombin-derived peptide based on prothrombin amino acid residues 508-530. The peptide acts as an agonist of the non-proteolytically activated thrombin receptor and has antiulcer activity. A claimed method of promoting healing of a chronic dermal skin ulcer on a subject comprises contacting the ulcer with an effective amount of this peptide, or an N-terminal truncated fragment of it having at least 14 amino acids, or a C-terminal truncated fragment of it having at least 18 amino acids. Preferably, the peptide has -H at the N-terminus and -NH2 or -OH at the C-terminus. An example is peptide TP508 (see ABP72757), which was shown in an example from the invention to accelerate the healing of chronic diabetic ulcers and to increase the percentage of ulcer closure. The thrombin-derived peptides of the invention can be used to treat a chronic dermal skin ulcer, especially a diabetic ulcer, decubitus ulcer, venous stasis ulcer or an arterial ulcer on a human, a companion animal, farm animal or laboratory animal. They are inexpensive to produce and cause few, if any, side effects.

ACCESSION NUMBER: ABP72755 Peptide DGENE

TITLE: Promoting healing of chronic dermal skin ulcer such as diabetic ulcer, on a subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin

19p

27p

receptor

INVENTOR: Carney D H

(TEXA) UNIV TEXAS SYSTEM. PATENT ASSIGNEE: PATENT INFO: WO 2003013569 A2 20030220 APPLICATION INFO: WO 2002-US1151 20020116

PRIORITY INFO:

DOCUMENT TYPE: Patent LANGUAGE:

English

OTHER SOURCE:

2003-289898 [28]

DESCRIPTION:

Antiulcer peptide derived from human thrombin.

L5 ANSWER 19 OF 25 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

US 2001-308198P 20010727

ΤI Stimulating bone growth at a site in a subject in need of osteoinduction, such as a site of bone graft, segmental bone gap, bone void or non-union structure, by administering agonist of activated thrombin receptor

AN AAU78376 Peptide DGENE

The invention describes a method of stimulating bone growth at a site in AB a subject in need of osteoinduction. The method involves administering an agonist to stimulate bone growth at a site in a subject (e.g. a farm animal, companion animal or laboratory animal), in need of osteoinduction, such as the site in need of a bone graft in a subject, a segmental bone gap, a bone void or a non-union fracture. This sequence represents a thrombin peptide derivative obtained from a serine esterase that can stimulate or activate the non-proteolytically activated thrombin receptor.

ACCESSION NUMBER: AAU78376 Peptide DGENE

TITLE:

Stimulating bone growth at a site in a subject in need of osteoinduction, such as a site of bone graft, segmental bone gap, bone void or non-union structure, by administering

agonist of activated thrombin receptor

INVENTOR: Carney D H; Crowther R S; Simmons D J; Yang J; Redin W R

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002005836 A2 20020124

APPLICATION INFO: WO 2001-US22641 20010718 PRIORITY INFO: US 2000-219300P 20000719

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-303796 [34]

DESCRIPTION: Thrombin peptide derivative TP508.

ANSWER 20 OF 25 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN L5 Promoting cardiac tissue repair, stimulating revascularisation, stimulating vascular endothelial cell proliferation, and inhibiting TTvascular occlusion by using angiogenic thrombin derivative peptide

DGENE ΑN AAM50858 Peptide

The present peptide comprises a thrombin-derived peptide, TP508 AB that includes a thrombin receptor binding domain sequence (see also AAM50856) and a serine esterase conserved sequence (see also AAM50857). The peptide is used in a claimed method for promoting cardiac tissue repair. It is administered during or following cardiac surgery by injection into cardiac tissue, and may be formulated as a sustained release formulation. The thrombin derivative peptide is also used in claimed methods of stimulating revascularisation, stimulating vascular endothelial cell proliferation, inhibiting vascular occlusion, and inhibiting restenosis following balloon angioplasty, in which case it may be coated onto the catheter.

ACCESSION NUMBER: AAM50858 Peptide DGENE

TITLE: Promoting cardiac tissue repair, stimulating

> revascularisation, stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using

angiogenic thrombin derivative peptide

INVENTOR: Carney D H

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM.

PATENT INFO: WO 2002004008 A2 20020117 24p

APPLICATION INFO: WO 2001-US21944 20010712 US 2000-217583P 20000712 PRIORITY INFO:

DOCUMENT TYPE: LANGUAGE:

Patent English

OTHER SOURCE:

2002-179665 [23]

DESCRIPTION:

Thrombin-derived peptide used to promote cardiac tissue

repair.

ANSWER 21 OF 25 WPIDS COPYRIGHT 2004 THOMSON DERWENT On STN L5

Stimulation of bone growth and cartilage formation in e.g. bone graft and ΤI arthritic joints involves administration of a thrombin derivative peptide.

WPIDS 2003-721552 [68] AN

AΒ WO2003061690 A UPAB: 20031022

> NOVELTY - Stimulating bone growth, comprising administering a thrombin derivative peptide, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a pharmaceutical composition comprising an implant able, biocompatible carrier and a thrombin derivative peptide; and
- (2) culturing chondrocytes in vitro in the presence of a thrombin derivative peptide and further administering the cultured chondrocytes to a cartilage repair or growth site.

ACTIVITY - Osteopathic; Antiarthritic.

MECHANISM OF ACTION - Non-proteolytic thrombin receptor agonist. Young, male New Zealand rabbits (2-3 kg) (test) with defects in the trochlear groove of the femur were treated with TP508 (RTM) (thrombin receptor agonist) (10 mg) formulated in polylactic acid/polyglycolic acid (PLGA) controlled release microspheres. The control rabbits received PLGA microspheres without TP508 (RTM). After 9 weeks, the test rabbits exhibited a predominantly hyaline matrix with evidence of significant aggrecan content. The repair score for test/control rabbits were: 18.6 plus or minus 1.4/9.4 plus or minus 1.6 respectively.

USE - For stimulating bone growth and cartilage growth or repair in e.g. bone graft, segmental gap in a bone, bone void, at a non-union fracture, arthritic joints, and sites treated for cartilage damage or loss due to traumatic injury, and for culturing chondrocytes in vitro (claimed).

ADVANTAGE - The thrombin derivative peptide improves the quality of repair tissue, leads to more durable and functional restoration of joint bio mechanics, reduces the incidence of osteoarthritis in patients suffering from traumatic cartilage injuries and accelerates the rate of normal fracture healing in fracture or small gap defects.

Dwg.0/0 ACCESSION NUMBER:

2003-721552 [68] WPIDS

DOC. NO. NON-CPI: DOC. NO. CPI:

N2003-576968 C2003-198446

TITLE:

Stimulation of bone growth and cartilage formation in

e.g. bone graft and arthritic joints involves administration of a thrombin derivative peptide.

DERWENT CLASS: A96 B04 C03 D16 D22 P34

INVENTOR(S):

BERGMANN, J; CARNEY, D H; CROWTHER, R S; REDIN, W R;

SIMMONS, D J; STIERNBERG, J; YANG, J

PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

100

PATENT INFORMATION:

PATENT NO KIND DATE PG

WO 2003061690 A1 20030731 (200368) \* EN 24

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM

### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
	<del>-</del>		
WO 200306169	0 A1	WO 2002-US1451	20020117

PRIORITY APPLN. INFO: WO 2002-US1451 20020117

L5 ANSWER 22 OF 25 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI Use of a physiologically functional equivalent of an angiogenic thrombin derivative peptide for e.g. promoting cardiac tissue repair or inhibiting restenosis in a patient following balloon angioplasty.

AN 2003-663365 [62] WPIDS

AB WO2003061689 A UPAB: 20030928

NOVELTY - Promoting cardiac tissue repair involves administration of a physiologically functional equivalent of an angiogenic thrombin derivative peptide.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a stent coated with the angiogenic thrombin derivative peptide.

ACTIVITY - Vasotropic; Cardiant.

The vasotropic activity of Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val-CONH2 (TP508) was evaluated by using hypercholesterolemic New Zealand white rabbits. The iliac artery was injured with balloon angioplasty, followed by treatment with TP508 (test) for 7 days. Angiography was conducted prior to balloon angioplasty. The test samples of TP508 were dissolved/diluted in a sterile, pyrogen-free saline and administered by intravenous injection in 0.2 ml one day prior to surgery, the day of surgery and for 6 successive days post surgery. The saline was maintained as control.

A midline neck incision was made and the right carotid was exposed and incised. The test sample or control sample were then administered to rabbit. Sixteen samples were compared comprising 7 treated and 9 saline controls. The results for thickness of the restenotic lesion of test/control were found to be 0.202/0.332.

MECHANISM OF ACTION - Cardiac tissue repair promoter; Revascularization stimulator; Vascular endothelial cell proliferation stimulator; Restenosis inhibitor; Vascular occlusion inhibitor.

USE - The peptides are useful for promoting cardiac tissue repair; for stimulating revascularization, vascular endothelial cell proliferation; inhibiting restenosis in a patient following balloon angioplasty; inhibiting vascular occlusion; and for coating a stent (claimed). The peptides are also useful for promoting myocardium repair.

ADVANTAGE - The thrombin derivative peptides induce angiogenic proliferation and migration of endothelial cells, resulting in formation of new capillaries and collateral vessels to help restore function to damaged or ischemic heart tissue.

Dwg.0/0

ACCESSION NUMBER: 2003-663365 [62] WPIDS

DOC. NO. NON-CPI: N2003-529523 DOC. NO. CPI: C2003-180167

TITLE: Use of a phy

Use of a physiologically functional equivalent of an angiogenic thrombin derivative peptide for e.g. promoting cardiac tissue repair or inhibiting restenosis in a

patient following balloon angioplasty.

DERWENT CLASS: B04 P34

INVENTOR(S): CARNEY, D H

PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT: 10

#### PATENT INFORMATION:

# PATENT NO KIND DATE WEEK LA PG

WO 2003061689 A1 20030731 (200362)\* EN 14

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
		<del>-</del>	
WO 200306168	39 A1	WO 2002-US1396	20020116

#### PRIORITY APPLN. INFO: WO 2002-US1396 20020116

- L5 ANSWER 23 OF 25 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
- TI Promoting healing of chronic dermal skin ulcer such as diabetic ulcer, on a subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin receptor.
- AN 2003-289898 [28] WPIDS
- AB WO2003013569 A UPAB: 20030501

NOVELTY - Promoting (M) healing of a chronic dermal skin ulcer on a subject, comprises contacting the chronic dermal skin ulcer with a thrombin peptide derivative.

DETAILED DESCRIPTION - Promoting (M) healing of a chronic dermal skin ulcer on a subject comprises contacting the chronic dermal skin ulcer with a thrombin peptide derivative having the amino acid sequence (S1):

R1-Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val-R2 (S1)

R1-Asp-Asn-Met-Phe-Cys-Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Pro-Phe-Val-Met-Lys-Ser-Pro-Phe-R2 (S2)

- R1 = -H or R3-C(0)-;
- R2 = -OH or -NR4R5;
- R3 = -H or 1-6C alkyl group; and

R4 and R5 = -H, 1-6C alkyl group or taken together with nitrogen atom to which they are bonded, a non-aromatic heterocyclic group, provided that zero, one, two or three amino acids at positions 1-9 and 14-23 in the thrombin peptide derivative differ from the amino acid at the corresponding position of (S1), or positions 1-14 and 19-33 of the thrombin peptide derivative differ from the amino acid at the corresponding position of (S2), an N-terminal truncated fragment of the thrombin peptide derivative having at least 14 amino acids or a C-terminal truncated fragment of the thrombin peptide derivative having at least 18 amino acids.

ACTIVITY - Antiulcer.

A multi-center, randomized, double blind, three-arm Phase IIa pilot study evaluating synthetic thrombin peptide TP508 for accelerating the healing of chronic diabetic ulcers was designed. Patients were randomized to one of three topical treatment groups: 1 micro g of TP508 in saline applied twice weekly, 10 micro g of TP508 in saline applied twice weekly, or saline placebo applied twice weekly. All patients received a regiment of standard diabetic ulcer care consisting of initial sharp debridement, wound cleansing, wound dressing and wound pressure off loading. Wounds were evaluated twice a week for 20 weeks or until wound closure. Blood chemistry and hematology tests were performed at patient enrollment, and at weeks 5, 10, 15 and 20. A

radiographic assessment was conducted every 5 weeks to study effects on underlying bone composition. The primary efficacy endpoint was the proportion of patients that achieve full wound closure. Full wound closure was defined as 100% epithelialization, with no drainage and no infection, as determined by visual inspection by the clinician. Three different patient analysis groups were defined to better study the efficacy endpoints. The intent-to-treat (ITT) group included all 60 patients receiving study drug and was primarily used for safety evaluation. The per-protocol (PP) group included 40 patients that met a predefined set of criteria meant to assure the highest compliance with the protocol. The efficacy group included 46 patients which met standards that were chosen prior to unblinding to be most relevant to allow an accurate evaluation of wound healing. Primary endpoint results were described for each patient group. The primary efficacy endpoint results showed a dose response relationship for 100% closure in all populations examined, with 1 micro g treatments resulting in 4-15% more closure than saline placebo controls, and 10 micro g treatments resulting in 13-24% more closure than saline placebo controls. Specifically, in the PP treatment group, 5 of 15 or 33% healed in the saline placebo group, 5 of 11 or 45% healed in 1 micro g treatment group, and 8 of 14 or 57% healed in the 10 micro g group. In the efficacy (EF) group selected to include wounds slightly smaller and slightly larger than those in the stricter per protocol group, this trend was again seen with 38% healing in the placebo group, 53% healing in the 1 mu g group, and 60% healing in the 10 micro g group. The difference was again noted in the ITT population, although the percentage that healed in the saline placebo group was larger (48%) because this group included several small and superficial wounds that healed, but did not meet protocol to be defined as chronic diabetic wounds for the study. These results compared favorably to clinical trials for Regranex (RTM), where data compiled from 4 controlled randomized clinical trials showed that 83 of 254 or 33% of the vehicle placebo wounds healed by 20 weeks and 122 of 285 or 43% of the Regranex (RTM)-treated wounds healed by 20 weeks. These results showed an increased percentage of ulcer closure for patients treated with TP508 and indicated median healing times that reflected a faster rate of healing.

MECHANISM OF ACTION - Agonist of non-proteolytically activated thrombin receptor.

USE - (M) is useful for promoting healing of a chronic dermal skin ulcer, especially diabetic ulcer, decubitus ulcer, venous stasis ulcer or arterial ulcer, on a companion animal, farm animal or laboratory animal (claimed).

Dwq.0/0

ACCESSION NUMBER:

2003-289898 [28] WPIDS

DOC. NO. CPI:

C2003-075228

TITLE:

Promoting healing of chronic dermal skin ulcer such as diabetic ulcer, on a subject, by contacting the skin ulcer with an agonist of non-proteolytically activated thrombin recentor.

thrombin receptor.

DERWENT CLASS:

B04 B05 CARNEY, D H

INVENTOR(S):
PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

100

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2003013569 A2 20030220 (200328)\* EN 19

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

#### APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2003013569 A2	WO 2002-US1151	20020116

PRIORITY APPLN. INFO: US 2001-308198P 20010727

L5 ANSWER 24 OF 25 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI Stimulating bone growth at a site in a subject in need of osteoinduction, such as a site of bone graft, segmental bone gap, bone void or non-union structure, by administering agonist of activated thrombin receptor.

AN 2002-303796 [34] WPIDS

AB WO 200205836 A UPAB: 20020528

NOVELTY - Stimulating (M) bone growth at a site in a subject in need of osteoinduction, involves administering to the site, an agonist (I) of the non-proteolytically activated thrombin receptor.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a pharmaceutical composition (PC) comprising an implantable, biocompatible carrier and (I).

ACTIVITY - Osteopathic.

MECHANISM OF ACTION - Stimulator of bone growth; agonist of activated thrombin receptor

12.5 cm segmental defect was created in each ulna of 20 male New Zealand rabbits. The bilateral ulnar osteotomies were created exactly the same size by using a small metal guide to direct the cutting blade of the oscillating microsaw. Each rabbit acted as its own control, thus the left defect was filled with microspheres not containing TP508, while the right defect was filled with microspheres containing 100 or 200 micro g Tp508 (10 animals/group). Rabbits given bilateral ulnar osteomies were randomly divided into two groups. The first group received 100 micro g of TP508 in microspheres (30 mg) in the right limb and microspheres alone in the left limb. The second group was treated similarly, but received 200 mu g of TP508. Animals were X-rayed at 2-week intervals, beginning at week 3, and sacrificed at 9 weeks. 100 micro g of TP508 stimulated mineralization in the defect at 3 and 5 weeks post-surgery. X-rays at 7 and 9 weeks appeared similar to those obtained at 5 weeks. Animals were sacrificed at 9 weeks post-surgery and the ulna-radius was removed and photographed. In most cases a large defect was visible in ulnas from the control limbs, in contrast with the TP508-treated limbs, in which most of the defects were successfully closed. After sacrifice at 9 weeks post-surgery, repair strength was measured by torsion testing. The results showed that at 100 micro g, TP508 more than doubled the mechanical strength of the healing defect as measured by all the parameters tested. Even stronger repairs were noted in the 200 micro g group, with most parameters being approximately 50% higher than those seen in the low dose treatment group.

USE - (M) is useful for stimulating bone growth at a site in a subject (e.g. a farm animal, companion animal or laboratory animal), in need of osteoinduction, such as the site in need of a bone graft in a subject, a segmental bone gap, a bone void or a non-union fracture (claimed).

Dwg.0/0

ACCESSION NUMBER:

2002-303796 [34] WPIDS

DOC. NO. CPI:

C2002-088279

TITLE:

Stimulating bone growth at a site in a subject in need of osteoinduction, such as a site of bone graft, segmental bone gap, bone void or non-union structure, by

administering agonist of activated thrombin receptor.

A96 B04

DERWENT CLASS: INVENTOR(S):

CARNEY, D H; CROWTHER, R S; REDIN, W R; SIMMONS, D J;

YANG, J

PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

97

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2002005836 A2 20020124 (200234)\* EN 2

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001076977 A 20020130 (200236)

US 2002128202 A1 20020912 (200262)

US 2002182205 A1 20021205 (200301)

EP 1301196 A2 20030416 (200328) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

EP 1301196 B1 20031126 (200402) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DE 60101339 E 20040108 (200411)

### APPLICATION DETAILS:

PATENT NO KIND	API	PLICATION	DATE
WO 2002005836 A2	WO	2001-US22641	20010718
AU 2001076977 A	AU	2001-76977	20010718
US 2002128202 A1 Prov	visional US	2000-219300P	20000719
	US	2001-909122	20010719
US 2002182205 A1 Prov	visional US	2000-219300P	20000719
Conf	t of US	2001-909122	20010719
	US	2002-50692	20020116
EP 1301196 A2	EP	2001-954752	20010718
	WO	2001-US22641	20010718
EP 1301196 B1	EP	2001-954752	20010718
	WO	2001-US22641	20010718
DE 60101339 <b>E</b>	DE	2001-601339	20010718
	EP	2001-954752	20010718
	WO	2001-US22641	20010718

# FILING DETAILS:

PAT	TENT NO	KIND			PAT	CENT NO
AU	200107697	77 A	Based	on	WO	2002005836
ΕP	1301196	A2	Based	on	WO	2002005836
EΡ	1301196	B1	Based	on	WO	2002005836
DE	60101339	E	Based	on	EP	1301196
			Based	on	WO	2002005836

PRIORITY APPLN. INFO: US 2000-219300P 20000719; US 2001-909122 20010719; US 2002-50692 20020116

- L5 ANSWER 25 OF 25 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
- TI Promoting cardiac tissue repair, stimulating revascularization, stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using angiogenic thrombin derivative peptide.
- AN 2002-179665 [23] WPIDS
- AB WO 200204008 A UPAB: 20020411

NOVELTY - Promoting cardiac tissue repair or stimulating revascularization, stimulating vascular endothelial cell proliferation, inhibiting restenosis in a patient following balloon angioplasty, and for

inhibiting vascular occlusion in a patient by administering an angiogenic thrombin derivative peptide (I) to cardiac tissue or blood vessels.

ACTIVITY - Vasotropic; cardiant.

(I) was tested for vasotropic and cardiant activity. Yucatan minipigs had toroid shaped ameroid occluders placed on their proximal left circumflex arteries. The ameroid imbibed water over time, causing constriction of the vessel. Occlusion was verified four weeks after surgery by contrast enhanced angiography. At that time, each animal's chest was reopened, where upon the region of ischemia was injected with a slow release formulation of TP508 (100 micro 1, i.e., TP508-containing poly(D,L-lactide-co-glycolide) (PLGA) microspheres, suspended in a Pluronic gel, into 10 sites (100 micro l/site) in the ischemic area. Controls received PLGA microspheres in Pluronic gel without TP508. Baseline, and post-treatment angiograms and echocardiograms were obtained. Indices for myocardial wall thickening and cardiac ejection fraction showed trends that TP508 treated animals tolerated dobutamine-induced stress better than controls. After 3 weeks, the animals were evaluated with contrast enhanced echocardiography. Initial results on this limited number of animals demonstrated that TP508 treated animals under dobutamine stress had a slightly larger increase in ejection fraction and better maintained wall thickening compared to controls. Thus, this treatment appears to help restore functionality to the ischemic heart muscle.

MECHANISM OF ACTION - Angiogenic proliferation and endothelial cells migration inducer.

USE - The method utilizing (I) is useful for promoting cardiac tissue repair, stimulating revascularization, stimulating vascular endothelial cell proliferation, inhibiting restenosis in a patient following balloon angioplasty, and for inhibiting vascular occlusion in a patient (claimed). Dwg.0/3

ACCESSION NUMBER:

2002-179665 [23] WPIDS

DOC. NO. CPI:

C2002-055805

TITLE:

Promoting cardiac tissue repair, stimulating

revascularization, stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using

angiogenic thrombin derivative peptide.

DERWENT CLASS:

B04 B07 D22 CARNEY, D H

INVENTOR(S): PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK PG

WO 2002004008 A2 20020117 (200223)\* EN 24

97

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001078907 A 20020121 (200234)

US 2002061852 A1 20020523 (200239)

A2 20021106 (200281) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 2002187933 A1 20021212 (200301)

EP 1253937 B1 20030910 (200360) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR DE 60100740 E 20031016 (200376)

APPLICATION DETAILS:

WO	2002004008	A2		WO	2001-US21944	20010712
ΑU	2001078907	Α		ΑU	2001-78907	20010712
US	2002061852	A1	Provisional	US	2000-217583P	20000712
				US	2001-904090	20010712
ΕP	1253937	A2		EP	2001-957136	20010712
				WO	2001-US21944	20010712
US	2002187933	A1	Provisional	US	2000-217583P	20000712
			Cont of	US	2001-904090	20010712
				US	2002-50611	20020116
EΡ	1253937	B1		EΡ	2001-957136	20010712
				WO	2001-US21944	20010712
DE	60100740	E		DE	2001-600740	20010712
				ΕP	2001-957136	20010712
				WO	2001-US21944	20010712

## FILING DETAILS:

PAT	PENT NO K	IND			PA	TENT NO
AU	2001078907	A	Based	on	WO	2002004008
EР	1253937	A2	Based	on	WO	2002004008
ΕP	1253937	В1	Based	on	WO	2002004008
DE	60100740	E	Based	on	EP	1253937
			Based	on	WO	2002004008

PRIORITY APPLN. INFO: US 2000-217583P 20000712; US 2001-904090 20010712; US 2002-50611 20020116

=> d his

(FILE 'HOME' ENTERED AT 10:48:05 ON 17 FEB 2004)

FILE 'MEDLINE, USPATFULL, DGENE, FSTA, WPIDS' ENTERED AT 10:48:46 ON 17 FEB 2004

L1 0 S NPAR ORNON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS L2 39 S NPAR OR NON-PROTEOLYTIC THROMBIN CELL SURFACE RECEPTORS

L3 335034 S CARTILLAGE GROWTH OR REPAIR

L4 9 S L2 AND L3 L5 25 S TP508

=> s 13 and 15

L6 15 L3 AND L5

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 15 MEDLINE on STN

TI Effects of thrombin peptides on wound healing and proliferation and migration of normal human epidermal keratinocyte (NHEK).

OBJECTIVE: To define the effects of thrombin peptides on wound healing and NHEK proliferation and migration. METHODS: A wound model was made with four 1.5 cm circular full thickness dermal excisions on the back of each Sprague-Dawley rat. 0.1 microgram (40 microliter) TP508 was applied to each circular excisional wound in 9 rats, the other 9 received saline only. Wound area was calculated with JAVA Jandel and IMAGE PRO software. NHEK945 proliferation was assessed by MTT assay and direct cell count with a Coulter Counter. Cell migration was determined by 48-well Boyden Chamber. Cells migrated onto the lower surface of the filter were assessed by a Chemi Imager 4000 Image Analyzer and expressed as spot density. RESULTS: Wound area in rats treated with TP508 was 73.7% and 45.4% of saline control on day 7 and 14, respectively. NHEK945 proliferation was accelerated after adding thrombin and TP508.

The spot density of migrated cells was 76.7 plus minus 13.8 in medium

alone. After adding 1 microgram/ml of thrombin and 10 microgram/ml of TP508, the spot density was 104.4 plus minus 12.2 and 109.4 plus minus 14.6, respectively. CONCLUSION: Results of this study suggest that both thrombin and TP508 have significant actions on wound healing and NHEK proliferation and migration, which is important in wound repair.

ACCESSION NUMBER: 2002344571 MEDLINE

DOCUMENT NUMBER: 21866780 PubMed ID: 11876838

TITLE: Effects of thrombin peptides on wound healing and

proliferation and migration of normal human epidermal

keratinocyte (NHEK).

AUTHOR: Huang Y; Yang Z; Carney D

CORPORATE SOURCE: Institute of Burn Research, Southwestern Hospital, Third

Military Medical University, Chongqing 400038.

SOURCE: Zhonghua Shao Shang Za Zhi, (2000 Feb) 16 (1) 26-9.

Journal code: 100959418. ISSN: 1009-2587.

PUB. COUNTRY: China

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Chinese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200207

ENTRY DATE: Entered STN: 20020629

Last Updated on STN: 20020713 Entered Medline: 20020712

L6 ANSWER 2 OF 15 MEDLINE on STN

TI Thrombin peptide, TP508, stimulates angiogenic responses in animal models of dermal wound healing, in chick chorioallantoic membranes, and in cultured human aortic and microvascular endothelial cells.

AΒ The alpha-thrombin peptide, TP508, accelerates the healing of full-thickness wounds in both normal and ischemic skin. In wounds treated with TP508, a pattern of increased vascularization is consistently observed both grossly and microscopically when compared to wounds treated with saline. One possible mechanism by which the peptide accelerates wound healing is by promoting revascularization of granulation tissue at the injured site. To evaluate the angiogenic potential of TP508, the peptide was tested in the chick embryo chorioallantoic membrane (CAM), where it increased the density and size of CAM blood vessels relative to controls. Additionally, TP508 stimulated chemokinesis and chemotaxis in a dose-dependent fashion in cultured human aortic and human microvascular endothelial cells. Taken together, these in vivo and in vitro data support an angiogenic role for TP508 in wound healing. A working model is presented to explain how this 23-amino-acid peptide, which lacks proteolytic activity, is generated during wound healing and contributes to the nonproteolytic functions associated with alpha-thrombin during tissue repair.

ACCESSION NUMBER: 2002157334 MEDLINE

DOCUMENT NUMBER: 21886336 PubMed ID: 11888680

TITLE: Thrombin peptide, TP508, stimulates angiogenic

responses in animal models of dermal wound healing, in chick chorioallantoic membranes, and in cultured human

aortic and microvascular endothelial cells.

AUTHOR: Norfleet A M; Bergmann J S; Carney D H

CORPORATE SOURCE: Chrysalis BioTechnology, Inc., 2200 Market Street, Suite

600, Galveston, TX 77550, USA.

SOURCE: GENERAL PHARMACOLOGY, (2000 Nov) 35 (5) 249-54. Ref: 26

Journal code: 7602417. ISSN: 0306-3623.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200206

ENTRY DATE:

Entered STN: 20020313

Last Updated on STN: 20020620 Entered Medline: 20020619

L6 ANSWER 3 OF 15 MEDLINE on STN

TI Acceleration of full-thickness wound healing in normal rats by the synthetic thrombin peptide, TP508.

Thrombin is an essential factor in hemostasis, inflammation, and tissue AΒ repair. The synthetic thrombin peptide, TP508, binds to high-affinity thrombin receptors and mimics cellular effects of thrombin at sites of tissue injury. Treatment of full-thickness excisional wounds in normal rats with a single topical application of 0.1 microq TP508 (14 pmol/cm2) reproducibly accelerates wound closure, yielding wounds that on average close 39% more than controls by day 7 (p < 0.001). Wounds treated with 1.0 microg TP508 are 35% and 43% (p < 0.001) smaller than controls on day 7 and 10, respectively. rate of closure is approximately 40% greater in TP508-treated than vehicle-treated wounds (20 versus 14 mm2/day) and remains higher through day 7. Breaking strength after closure is slightly greater (15-23%) in wounds treated with TP508 than with saline alone. Histologic comparisons show that TP508 enhances recruitment of inflammatory cells to the wound site within 24 hours post-injury. TP508 treatment also augments revascularization of injured tissue, as evidenced at day 7 by the larger size of functional vessels in the granulation tissue and by the directed development of blood vessels to wounds. These studies raise the possibility that TP508 may be clinically useful in management of open wounds.

ACCESSION NUMBER: 2000

2000402971 MEDLINE

DOCUMENT NUMBER:

20345355 PubMed ID: 10886811

TITLE:

Acceleration of full-thickness wound healing in normal rats

by the synthetic thrombin peptide, TP508.

AUTHOR:

Stiernberg J; Norfleet A M; Redin W R; Warner W S; Fritz R

R; Carney D H

CORPORATE SOURCE:

Department of Human Biological Chemistry and Genetics, The

University of Texas Medical Branch, Galveston, Texas

77555-0645, USA. DK-25807 (NIDDK)

CONTRACT NUMBER:

GM-475472 (NIGMS)

SOURCE:

WOUND REPAIR AND REGENERATION, (2000 May-Jun) 8 (3) 204-15.

Journal code: 9310939. ISSN: 1067-1927.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200008

ENTRY DATE:

Entered STN: 20000901

Last Updated on STN: 20000901 Entered Medline: 20000821

L6 ANSWER 4 OF 15 USPATFULL on STN

TI Therapeutic and cosmetic uses of heparanases

AB Methods and compositions for inducing and/or accelerating wound healing and/or angiogenesis via the catalytic activity of heparanase are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:231625 USPATFULL

TITLE:

Therapeutic and cosmetic uses of heparanases

INVENTOR(S):

Ilan, Neta, Rehovot, ISRAEL

Vlodavsky, Israel, Mevaseret Zion, ISRAEL Yacoby-Zeevi, Oron, Moshav Bizaron, ISRAEL

Pecker, Iris, Rishon LeZion, ISRAEL Feinstein, Elena, Rehovot, ISRAEL

NUMBER KIND DATE -----

US 2003161823 A1 20030828 US 2003-341582 A1 20030114 PATENT INFORMATION:

APPLICATION INFO.: 20030114 (10) RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2001-988113, filed on 19 Nov 2001, PENDING Continuation of Ser. No. US 2001-776874, filed on 6 Feb 2001, PENDING Continuation

of Ser. No. US 1999-258892, filed on 1 Mar 1999, ABANDONED Continuation-in-part of Ser. No. WO 1998-US17954, filed on 31 Aug 1998, PENDING

Continuation-in-part of Ser. No. WO 2001-IL830, filed

on 5 Sep 2001, UNKNOWN

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: G.E. EHRLICH (1995) LTD., c/o ANTHONY CASTORINA, SUITE

207, 2001 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 49 Drawing Page(s)

LINE COUNT: 7437

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 15 USPATFULL on STN

Stimulation of cartilage growth with agonists of the non-proteolytically TT

activated thrombin receptor

Disclosed is a method of stimulating cartilage growth, repair ΔR or regeneration at a site in a subject in need of such growth,

repair or regeneration. The method comprises the step of administering a therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:344424 USPATFULL

TITLE: Stimulation of cartilage growth with agonists of the

non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Stiernberg, Janet, Paris, TX, UNITED STATES

Bergmann, John, Galveston, TX, UNITED STATES

Univ. of Texas System, Board of Regents, Austin, TX, PATENT ASSIGNEE(S):

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION:

US 2002198154 A1 20021226 US 2002-50688 A1 20020116 (10) APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-909348, filed on 19

Jul 2001, PENDING

NUMBER DATE -----

PRIORITY INFORMATION: US 2000-219800P 20000720 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: 2.8 EXEMPLARY CLAIM: 1

INVENTOR(S):

LINE COUNT: 862 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 15 USPATFULL on STN L6

TIMethods of therapy with thrombin derived peptides

ABThe present invention relates to a method for promoting cardiac tissue repair comprising administering to the cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide and/or inhibiting or reducing vascular occlusion or restenosis. The invention also relates to methods of stimulating revascularization. In yet another embodiment, the invention relates to the use of thrombin derivative peptides in the manufacture of a medicament for the methods described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2002:330250 USPATFULL ACCESSION NUMBER:

Methods of therapy with thrombin derived peptides TITLE:

Carney, Darrell H., Dickinson, TX, UNITED STATES INVENTOR(S): PATENT ASSIGNEE(S): Univ. of Texas System, Board of Regents, Austin, TX,

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: US 2002187933 A1 20021212 US 2002-50611 A1 20020116

APPLICATION INFO.: (10)

Continuation of Ser. No. US 2001-904090, filed on 12 RELATED APPLN. INFO.:

Jul 2001, PENDING

NUMBER DATE \_\_\_\_\_\_\_

PRIORITY INFORMATION: US 2000-217583P 20000712 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 716

INVENTOR(S):

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 15 USPATFULL on STN L6

Stimulation of bone growth with thrombin peptide derivatives TT

Disclosed is a method of stimulating bone growth at a site in a subject AB

in need of osteoinduction. The method comprises the step of

administering a therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:322044 USPATFULL

TITLE: Stimulation of bone growth with thrombin peptide

derivatives

Carney, Darrell H., Dickinson, TX, UNITED STATES Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES

Yang, Jinping, Galveston, TX, UNITED STATES Redin, William R., Dickinson, TX, UNITED STATES

Univ. of Texas System, Board of Regents, Austin, TX, PATENT ASSIGNEE(S):

UNITED STATES, 78701 (U.S. corporation)

NUMBER KIND DATE \*\*\*\*\*\* PATENT INFORMATION: US 2002182205 A1 20021205 APPLICATION INFO.: US 2002-50692 A1 20020116 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-909122, filed on 19

#### Jul 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2000-219300P 20000719 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA

ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133

NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
LINE COUNT: 846

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 15 USPATFULL on STN

TI Stimulation of bone growth with thrombin peptide derivatives

AB Disclosed is a method of stimulating bone growth at a site in a subject

in need of osteoinduction. The method comprises the step of

administering a therapeutically effective amount of an agonist of the

non-proteolytically activated thrombin receptor to the site.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:236005 USPATFULL

TITLE: Stimulation of bone growth with thrombin peptide

derivatives

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

Crowther, Roger S., League City, TX, UNITED STATES Simmons, David J., St. Louis, MO, UNITED STATES Yang, Jinping, Galveston, TX, UNITED STATES

Redin, William R., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S): The Board of Regents, The University of TX. System

(U.S. corporation)

\_\_\_\_\_\_

NUMBER DATE

PRIORITY INFORMATION: US 2000-219300P 20000719 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
LINE COUNT: 797

LINE COUNT: 797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 15 USPATFULL on STN

TI Methods of therapy with thrombin derived peptides

The present invention relates to a method for promoting cardiac tissue repair comprising administering to the cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide and/or inhibiting or reducing vascular occlusion or restenosis. The invention also relates to methods of stimulating revascularization. In yet another embodiment, the invention relates to the use of thrombin derivative peptides in the manufacture of a medicament for the methods

described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:119864 USPATFULL

TITLE: Methods of therapy with thrombin derived peptides

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES

PATENT ASSIGNEE(S): The Board of Regents, The University of Texas System

(U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2000-217583P 20000712 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 683

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 15 USPATFULL on STN

TI Stimulation of cartilage growth with agonists of the non-proteolytically

activated thrombin receptor

AB Disclosed is a method of stimulating cartilage growth, repair or regeneration at a site in a subject in need of such growth, repair or regeneration. The method comprises the step of

administering a therapeutically effective amount of an agonist of the non-proteolytically activated thrombin receptor to the site.

Also disclosed is a method of stimulating the proliferation and expansion of chrondrocytes in vitro. The method comprises culturing chrondrocytes in the presence of a stimulating amount of an NPAR agonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:78716 USPATFULL

TITLE: Stimulation of cartilage growth with agonists of the

non-proteolytically activated thrombin receptor Carney, Darrell H., Dickinson, TX, UNITED STATES

INVENTOR(S): Carney, Darrell H., Dickinson, TX, UNITED STATES
Crowther, Roger S., League City, TX, UNITED STATES

Stiernberg, Janet, Paris, TX, UNITED STATES

Bergmann, John, Galveston, TX, UNITED STATES

PATENT ASSIGNEE(S): The Board of Regents, The University of Texas System

(U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2000-219800P 20000720 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Carolyn S. Elmore, HAMILTON, BROOK, SMITH & REYNOLDS,

P.C., Two Militia Drive, Lexington, MA, 02421-4799

NUMBER OF CLAIMS: 21

EXEMPLARY CLAIM: 1
LINE COUNT: 836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 15 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN L6 Promoting cardiac tissue repair, stimulating revascularisation, TI

stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using angiogenic thrombin derivative peptide

ANAAM50858 Peptide DGENE

The present peptide comprises a thrombin-derived peptide, TP508 AΒ that includes a thrombin receptor binding domain sequence (see also AAM50856) and a serine esterase conserved sequence (see also AAM50857). The peptide is used in a claimed method for promoting cardiac tissue repair. It is administered during or following cardiac surgery by injection into cardiac tissue, and may be formulated as a sustained release formulation. The thrombin derivative peptide is also used in claimed methods of stimulating revascularisation, stimulating vascular endothelial cell proliferation, inhibiting vascular occlusion, and inhibiting restenosis following balloon angioplasty, in which case it may be coated onto the catheter.

ACCESSION NUMBER: AAM50858 Peptide DGENE

TITLE:

Promoting cardiac tissue repair, stimulating

revascularisation, stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using

24p

angiogenic thrombin derivative peptide

INVENTOR: Carney D H

PATENT ASSIGNEE: (TEXA) UNIV TEXAS SYSTEM. PATENT INFO: WO 2002004008 A2 20020117

APPLICATION INFO: WO 2001-US21944 20010712 PRIORITY INFO: US 2000-217583P 20000712

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2002-179665 [23]

DESCRIPTION: Thrombin-derived peptide used to promote cardiac tissue

repair.

ANSWER 12 OF 15 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN L6

Stimulation of bone growth and cartilage formation in e.g. bone graft and ΤI arthritic joints involves administration of a thrombin derivative peptide.

AN 2003-721552 [68]

WO2003061690 A UPAB: 20031022

NOVELTY - Stimulating bone growth, comprising administering a thrombin derivative peptide, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a pharmaceutical composition comprising an implant able, biocompatible carrier and a thrombin derivative peptide; and
- (2) culturing chondrocytes in vitro in the presence of a thrombin derivative peptide and further administering the cultured chondrocytes to a cartilage repair or growth site.

ACTIVITY - Osteopathic; Antiarthritic.

MECHANISM OF ACTION - Non-proteolytic thrombin receptor agonist. Young, male New Zealand rabbits (2-3 kg) (test) with defects in the trochlear groove of the femur were treated with TP508 (RTM) (thrombin receptor agonist) (10 mg) formulated in polylactic acid/polyglycolic acid (PLGA) controlled release microspheres. The control rabbits received PLGA microspheres without TP508 (RTM). After 9 weeks, the test rabbits exhibited a predominantly hyaline matrix with evidence of significant aggrecan content. The repair score for test/control rabbits were: 18.6 plus or minus 1.4/9.4 plus or minus 1.6

USE - For stimulating bone growth and cartilage growth or repair in e.g. bone graft, segmental gap in a bone, bone void, at a non-union fracture, arthritic joints, and sites treated for cartilage damage or loss due to traumatic injury, and for culturing chondrocytes in vitro (claimed).

ADVANTAGE - The thrombin derivative peptide improves the quality of repair tissue, leads to more durable and functional restoration of joint bio mechanics, reduces the incidence of osteoarthritis in patients

suffering from traumatic cartilage injuries and accelerates the rate of normal fracture healing in fracture or small gap defects.

Dwq.0/0

ACCESSION NUMBER: 2003-721552 [68] WPIDS

DOC. NO. NON-CPI: N2003-576968 DOC. NO. CPI: C2003-198446

TITLE: Stimulation of bone growth and cartilage formation in

e.g. bone graft and arthritic joints involves administration of a thrombin dérivative peptide.

A96 B04 C03 D16 D22 P34 DERWENT CLASS:

BERGMANN, J; CARNEY, D H; CROWTHER, R S; REDIN, W R; INVENTOR(S):

SIMMONS, D J; STIERNBERG, J; YANG, J

PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG 

WO 2003061690 A1 20030731 (200368) \* EN 24

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM

#### APPLICATION DETAILS:

PATENT NO KIN	D APP	LICATION	DATE
		<b></b>	
WO 2003061690 A	.1 WO	2002-US1451	20020117

#### PRIORITY APPLN. INFO: WO 2002-US1451 20020117

L6 ANSWER 13 OF 15 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TIUse of a physiologically functional equivalent of an angiogenic thrombin derivative peptide for e.g. promoting cardiac tissue repair or inhibiting restenosis in a patient following balloon angioplasty.

AN 2003-663365 [62] WPIDS

WO2003061689 A UPAB: 20030928 AB

> NOVELTY - Promoting cardiac tissue repair involves administration of a physiologically functional equivalent of an angiogenic thrombin derivative peptide.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a stent coated with the angiogenic thrombin derivative peptide.

ACTIVITY - Vasotropic; Cardiant.

The vasotropic activity of Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val-CONH2 (TP508 ) was evaluated by using hypercholesterolemic New Zealand white rabbits. The iliac artery was injured with balloon angioplasty, followed by treatment with TP508 (test) for 7 days. Angiography was conducted prior to balloon angioplasty. The test samples of TP508 were dissolved/diluted in a sterile, pyrogen-free saline and administered by intravenous injection in 0.2 ml one day prior to surgery, the day of surgery and for 6 successive days post surgery. The saline was maintained as control.

A midline neck incision was made and the right carotid was exposed and incised. The test sample or control sample were then administered to rabbit. Sixteen samples were compared comprising 7 treated and 9 saline controls. The results for thickness of the restenotic lesion of test/control were found to be 0.202/0.332.

MECHANISM OF ACTION - Cardiac tissue repair promoter;

Revascularization stimulator; Vascular endothelial cell proliferation stimulator; Restenosis inhibitor; Vascular occlusion inhibitor.

USE - The peptides are useful for promoting cardiac tissue repair; for stimulating revascularization, vascular endothelial cell proliferation; inhibiting restenosis in a patient following balloon angioplasty; inhibiting vascular occlusion; and for coating a stent (claimed). The peptides are also useful for promoting myocardium repair.

ADVANTAGE - The thrombin derivative peptides induce angiogenic proliferation and migration of endothelial cells, resulting in formation of new capillaries and collateral vessels to help restore function to damaged or ischemic heart tissue.

Dwg.0/0

ACCESSION NUMBER:

2003-663365 [62] WPIDS

DOC. NO. NON-CPI:

N2003-529523

DOC. NO. CPI:

C2003-180167

TITLE:

Use of a physiologically functional equivalent of an

angiogenic thrombin derivative peptide for e.g. promoting

cardiac tissue repair or inhibiting restenosis

in a patient following balloon angioplasty.

DERWENT CLASS:

B04 P34

INVENTOR(S):

CARNEY, D H

PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

100

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2003061689 A1 20030731 (200362) \* EN 14

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

#### APPLICATION DETAILS:

PAT	TENT NO	KIND	AP	PLICATION	DATE
		<b></b>			
WO	20030616	89 A1	WO	2002-US1396	20020116

# PRIORITY APPLN. INFO: WO 2002-US1396 20020116

- L6 ANSWER 14 OF 15 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
- TI Stimulating bone growth at a site in a subject in need of osteoinduction, such as a site of bone graft, segmental bone gap, bone void or non-union structure, by administering agonist of activated thrombin receptor.
- AN 2002-303796 [34] WPIDS
- AB WO 200205836 A UPAB: 20020528

NOVELTY - Stimulating (M) bone growth at a site in a subject in need of osteoinduction, involves administering to the site, an agonist (I) of the non-proteolytically activated thrombin receptor.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a pharmaceutical composition (PC) comprising an implantable, biocompatible carrier and (I).

ACTIVITY - Osteopathic.

MECHANISM OF ACTION - Stimulator of bone growth; agonist of activated thrombin receptor

 $12.5~\rm cm$  segmental defect was created in each ulna of 20 male New Zealand rabbits. The bilateral ulnar osteotomies were created exactly the same size by using a small metal guide to direct the cutting blade of the

oscillating microsaw. Each rabbit acted as its own control, thus the left defect was filled with microspheres not containing TP508, while the right defect was filled with microspheres containing 100 or 200 micro g Tp508 (10 animals/group). Rabbits given bilateral ulnar osteomies were randomly divided into two groups. The first group received 100 micro g of TP508 in microspheres (30 mg) in the right limb and microspheres alone in the left limb. The second group was treated similarly, but received 200 mu g of TP508. Animals were X-rayed at 2-week intervals, beginning at week 3, and sacrificed at 9 weeks. 100 micro g of TP508 stimulated mineralization in the defect at 3 and 5 weeks post-surgery. X-rays at 7 and 9 weeks appeared similar to those obtained at 5 weeks. Animals were sacrificed at 9 weeks post-surgery and the ulna-radius was removed and photographed. In most cases a large defect was visible in ulnas from the control limbs, in contrast with the TP508-treated limbs, in which most of the defects were successfully closed. After sacrifice at 9 weeks post-surgery, repair strength was measured by torsion testing. The results showed that at 100 micro g, TP508 more than doubled the mechanical strength of the healing defect as measured by all the parameters tested. Even stronger repairs were noted in the 200 micro q group, with most parameters being approximately 50% higher than those seen in the low dose treatment group.

USE - (M) is useful for stimulating bone growth at a site in a subject (e.g. a farm animal, companion animal or laboratory animal), in need of osteoinduction, such as the site in need of a bone graft in a subject, a segmental bone gap, a bone void or a non-union fracture (claimed).

Dwg.0/0

ACCESSION NUMBER: 2002-303796 [34] WPIDS

DOC. NO. CPI:

C2002-088279

TITLE:

Stimulating bone growth at a site in a subject in need of

osteoinduction, such as a site of bone graft, segmental

bone gap, bone void or non-union structure, by

administering agonist of activated thrombin receptor.

DERWENT CLASS:

A96 B04

INVENTOR(S):

CARNEY, D H; CROWTHER, R S; REDIN, W R; SIMMONS, D J;

YANG, J

97

PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG \_\_\_\_\_\_

WO 2002005836 A2 20020124 (200234)\* EN 27

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001076977 A 20020130 (200236)

US 2002128202 A1 20020912 (200262)

US 2002182205 A1 20021205 (200301)

A2 20030416 (200328) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

EP 1301196 B1 20031126 (200402) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DE 60101339 E 20040108 (200411)

# APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

WO	2002005836	A2		WO	2001-US22641	20010718
ΑU	2001076977	Α		AU	2001-76977	20010718
US	2002128202	A1	Provisional	US	2000-219300P	20000719
				US	2001-909122	20010719
US	2002182205	Α1	Provisional	US	2000-219300P	20000719
			Cont of	US	2001-909122	20010719
				US	2002-50692	20020116
$\mathbf{EP}$	1301196	A2		EP	2001-954752	20010718
				WO	2001-US22641	20010718
EP	1301196	В1		EP	2001-954752	20010718
				WO	2001-US22641	20010718
DE	60101339	E		DE	2001-601339	20010718
				EP	2001-954752	20010718
				WO	2001-US22641	20010718

### FILING DETAILS:

PAT	TENT NO K	IND			PAT	TENT NO
7 II A	2001076977	7\	Raced	on	₩O	2002005836
	1301196		Based			2002005836
	1301196		Based			2002005836
	60101339		Based			1301196
			Based	on -	WO	2002005836

PRIORITY APPLN. INFO: US 2000-219300P 20000719; US 2001-909122 20010719; US 2002-50692 20020116

- L6 ANSWER 15 OF 15 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
  TI Promoting cardiac tissue **repair**, stimulating revascularization,
  stimulating vascular endothelial cell proliferation, and inhibiting
  vascular occlusion by using angiogenic thrombin derivative peptide.
- AN 2002-179665 [23] WPIDS
- AB WO 200204008 A UPAB: 20020411

NOVELTY - Promoting cardiac tissue **repair** or stimulating revascularization, stimulating vascular endothelial cell proliferation, inhibiting restenosis in a patient following balloon angioplasty, and for inhibiting vascular occlusion in a patient by administering an angiogenic thrombin derivative peptide (I) to cardiac tissue or blood vessels.

ACTIVITY - Vasotropic; cardiant.

(I) was tested for vasotropic and cardiant activity. Yucatan minipigs had toroid shaped ameroid occluders placed on their proximal left circumflex arteries. The ameroid imbibed water over time, causing constriction of the vessel. Occlusion was verified four weeks after surgery by contrast enhanced angiography. At that time, each animal's chest was reopened, where upon the region of ischemia was injected with a slow release formulation of TP508 (100 micro 1, i.e., TP508-containing poly(D,L-lactide-co-glycolide) (PLGA) microspheres, suspended in a Pluronic gel, into 10 sites (100 micro l/site) in the ischemic area. Controls received PLGA microspheres in Pluronic gel without TP508. Baseline, and post-treatment angiograms and echocardiograms were obtained. Indices for myocardial wall thickening and cardiac ejection fraction showed trends that TP508 treated animals tolerated dobutamine-induced stress better than controls. After 3 weeks, the animals were evaluated with contrast enhanced echocardiography. Initial results on this limited number of animals demonstrated that TP508 treated animals under dobutamine stress had a slightly larger increase in ejection fraction and better maintained wall thickening compared to controls. Thus, this treatment appears to help restore functionality to the ischemic heart muscle.

MECHANISM OF ACTION - Angiogenic proliferation and endothelial cells migration inducer.

USE - The method utilizing (I) is useful for promoting cardiac tissue repair, stimulating revascularization, stimulating vascular

endothelial cell proliferation, inhibiting restenosis in a patient following balloon angioplasty, and for inhibiting vascular occlusion in a patient (claimed).

Dwg.0/3

ACCESSION NUMBER:

2002-179665 [23] WPIDS

DOC. NO. CPI:

C2002-055805

TITLE:

Promoting cardiac tissue repair, stimulating

revascularization, stimulating vascular endothelial cell proliferation, and inhibiting vascular occlusion by using

angiogenic thrombin derivative peptide.

DERWENT CLASS:

B04 B07 D22

INVENTOR(S):

CARNEY, D H

PATENT ASSIGNEE(S):

(TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2002004008 A2 20020117 (200223)\* EN 24

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001078907 A 20020121 (200234)

US 2002061852 A1 20020523 (200239)

EP 1253937 A2 20021106 (200281) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 2002187933 A1 20021212 (200301)

EP 1253937 B1 20030910 (200360) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DE 60100740 E 20031016 (200376)

### APPLICATION DETAILS:

PATENT NO KI	ND	APPLICATION	DATE
WO 2002004008	A2	WO 2001-US21944	20010712
AU 2001078907	A	AU 2001-78907	20010712
US 2002061852	A1 Provisional	US 2000-217583P	20000712
		US 2001-904090	20010712
EP 1253937	A2	EP 2001-957136	20010712
		WO 2001-US21944	20010712
US 2002187933	A1 Provisional	US 2000-217583P	20000712
	Cont of	US 2001-904090	20010712
		US 2002-50611	20020116
EP 1253937	B1	EP 2001-957136	20010712
		WO 2001-US21944	20010712
DE 60100740	E	DE 2001-600740	20010712
		EP 2001-957136	20010712
		WO 2001-US21944	20010712

#### FILING DETAILS:

PATENT NO K	IND	PATENT NO
AU 2001078907	A Based on	WO 2002004008
EP 1253937	A2 Based on	WO 2002004008
EP 1253937	B1 Based on	WO 2002004008
DE 60100740	E Based on	EP 1253937
	Based on	WO 2002004008

PRIORITY APPLN. INFO: US 2000-217583P 20000712; US 2001-904090 20010712; US 2002-50611 20020116